THE

AMERICAN

MEDICAL RECORDER.

VOL. XIII. *APRIL*, 1828. NO. II.

MEDICAL PRIZE ESSAY.

An Essay, Pharmacological and Therapeutical, on Sanguinaria-Canadensis, with a plate. By WILLIAM TULLY, M.D. of Albany, New-York.

(Continued from page 48 of our last number.)

7th. DYSPNŒA-EXACERBANS, or *exacerbating Dyspnœa.* When this disease does not depend upon organic or structural affections of any kind, Sanguinaria is often efficacious for its relief. For the relief of a paroxysm, from one to four fluidrachms of the tincture, wine, or vinegar of Sanguinaria, may be given every ten or fifteen minutes, till the symptoms subside, which sometimes does not happen, till vomiting is produced, but more frequently the subsidence is complete, without this operation. The relief is in general more speedy, and more effectual, when twenty or thirty minims of the tincture of Opium are given in conjunction with the first dose of Sanguinaria. At the commencement of a paroxysm, I have often produced perfect relief, by a single full dose of Sanguinaria and Opium. A compound of the tinctures of Sanguinaria and Lobelia-inflata possesses also greater efficacy in Dyspnœa-exacerbans, than either alone. The most suitable proportions for the mixture, are about equal parts of the two. This preparation may be given in the same doses, and with the same management, which is directed for San-

guinaria merely. Many suppose that vomiting, as an evacuation merely, and without any regard to the article by which it is produced, is to be principally relied on for the relief of a paroxysm of Dyspnœa-exacerbans; and from these notions, they imagine that Antimony, for example, is just as efficacious as Sanguinaria. There are the best reasons, however, for concluding that the efficacy of Sanguinaria in this complaint, depends altogether upon some operation which it exerts entirely independent of the evacuation of vomiting—an operation which Antimony is not capable of producing. This conclusion seems to be confirmed by the fact that Sanguinaria oftener affords relief without this effect, than consequent to it. It is an undoubted fact, that vomiting with certain articles, produces very little benefit in this disease, and on the whole is ultimately and remotely disadvantageous; while the same operation, when produced by other articles, is attended with effectual present relief, and a permanent mitigation of the disease at the same time. Hence, it may be fairly inferred, that the benefit in such cases does not depend solely on the evacuation of vomiting, but rather upon some other effect which the article employed as an emetic, always produces. In the intervals of the paroxysms, when, as I have said above, they do not depend upon any organic or structural affection, the continued use of Sanguinaria, or better, Sanguinaria and Lobelia, in as large doses as the stomach will bear without disquiet, and repeated about four times a day, is for the most part, a very effectual means of obviating the diathesis upon which this complaint depends. The liberal employment at the same time of Iron, or some other mineral tonic, is generally useful to retain what is gained by the Sanguinaria.

In Dyspnœa-chronica, or chronic Dyspnœa, Sanguinaria, though not always entirely useless, is nevertheless of very trifling importance.

8th. ASTHMA-SICCUM ET HUMIDUM, or *dry and humid Asthma.* Sanguinaria may be employed without much advantage for the relief of the paroxysms of these two sorts of disordered respiration, as for those of Dyspnœa-exacerbans. It requires the same combination, the same management, and, in general, the same doses that are directed in the last mentioned complaint. It is, however, much less efficacious as a prophylactic of Asthma, than of Dyspnœa; but in Asthma-humidum, which approaches the nearest to, and sometimes even passes into Dyspnœa-exacerbans, its continued use often greatly assists other appropriate remedies. In pure Asthma,

in contradistinction from Dyspnœa, Sanguinaria is, I think, inferior to Lobelia-inflata, and probably to several other acrid-narcotics; though still it is valuable as an auxiliary.

9th. PARISTHMITIS-TYPHODES V. NERVOSA, an affection of the fauces, in which the inflammation is of the common phlegmonous or suppurative sort, but at the same time of an unequivocally atonic, or passive character, though without any gangrænous tendency, and the accompanying constitutional affection a Typhus of the pure nervous-type. At the outset of this disease, or at least in its early stages, and sometimes even in the latter, vomiting is often required. For this purpose, however, some emetics have a very great preference over others. Though Antimony is highly valuable in entonic or active inflammations of the fauces, it is certainly very ill adapted to this. On the contrary, Sanguinaria is one of the best articles for an emetic in this disease, with which I am acquainted. The strong impression which it makes upon the fauces, in consequence of its acrimony, and the deobstruent and counteracting effects which it produces in addition to vomiting, render it preferable to any thing else. Either Per-Sulphate of Mercury, Per-Sulphate of Copper, Sulphate of Zinc, or even Cephælis-Ipecacuanha, may or may not be necessary to assist its operation. This must be regulated entirely by circumstances. For this disease, the tincture is always preferable to any other preparation.

In cases of this complaint, which, instead of being accompanied by a non-malignant Nervous-fever, are, in fact, attended by a perfect Typhus-syncopalis, as is not infrequent in those parts of the country where this latter fever has been prevalent, there is then usually so much general exhaustion, as to make much caution necessary with respect to the use of emetics. Such a modification of the complaint, in some instances, absolutely forbids the use of any emetic whatever; but this is by no means generally the fact, and certainly not, when the patient is properly supported by Opium, Alcohol, Capsicum, Cinchona, etc.

10th. PARISTHMITIS-TYPHODES V. ERYTHEMATICA, an affection of the fauces in which the inflammation is of the erythematic sort, but varying through a range from that variety which has sometimes been denominated *phlegmonodes*, to that which is *sub-gangrænous* at its commencement; a disease in which the constitutional affection is always a Typhus of the putrid type, but steadily varying, in correspondence with the grade of the local affection, through a range of which one

extreme constitutes what is commonly called Synochus, and the other the lowest and most malignant Putrid-fever. In this disease, as in the preceding, emetics are often indicated, and great exhaustion is almost the only contraindicating circumstance, when in other respects, they seem to be required. The same sort of emetics that are best in the preceding, are likewise to be preferred in this, and they require the same management, and the same auxiliaries.

11th. PARISTHMITIS-MEMBRANIFICA, or *membranific Quinsey*, otherwise called *pellicular*, *coriaceous*, or *diphtheritic inflammation of the tonsils and fauces generally*. Although in that section of the country where I have hitherto principally practised, this form of Paristhmitis has been recognized only in sporadic cases, yet it has been long known under such circumstances ;—so long indeed that all the most important observations of Dr. Bretonneau, of Tours, respecting its treatment, have been amply verified. In the very elaborate work of Dr. Bretonneau upon this disease, it is undoubtedly said truly, that its principal danger is to be referred to the mechanical obstruction which it occasions to the performance of certain functions essential to life,—that it is rarely susceptible of spontaneous cure,—and that neither depletion by the lancet or leeches, nor purging, nor vomiting, (at least by Antimony,) nor blistering, are of the least service. But I can declare, that vomiting with Sanguinaria is often of very material benefit, though probably not so much to be relied on as an exclusive remedy as Proto-Chlorid of Mercury, and Opium, which compound is far preferable to the Proto-Chlorid of Mercury alone—the sole internal remedy upon which Dr. Bretonneau ultimately placed any reliance. Had this gentleman been acquainted with the power of Sanguinaria, when used either as an emetic, or in repeated doses that fall short of vomiting, to change the condition and action of the secernents and absorbents, and to produce a resolution of atonic acute, sub-acute, and chronic inflammations of various specific natures, but more especially when membranific, or, as he terms it, pellicular, coriaceous or diphtheritic; and had he known the utility of combining Opium with the Proto-Chlorid of Mercury for the relief of this disease, he would certainly have managed his cases much more conveniently, if not more successfully. As it is not my purpose, in this essay, to mention any other modes of medication beside those by Sanguinaria, it will be unnecessary for me to say any thing of the local application of the Hydro-Chloric-acid to the fauces at the outset of the disease, as practised by

Dr. Bretonneau, and of the similar use of a solution of the Nitrate of Silver, or an infusion or tincture of Capsicum, which have long been employed by a few practitioners of Connecticut, and as would appear respecting the former, by Mr. Mackenzie of Glasgow. Nor will it be necessary for me to dwell any longer, even upon the use of Sanguinaria in conjunction with Proto-Chlorid of Mercury and Opium, since the next disease in which I shall mention the employment of Sanguinaria is membranific, pellicular, coriaceous, or diphtheritic inflammation of the lining membrane of the larynx, trachea, and bronchiæ, the disease into which membranific Quinsey commonly passes, when it proves fatal. Suffice it here to say, that the same method and course which so effectually relieves membranific inflammation of the respiratory organs, is equally effectual in relieving the same sort of inflammation, when it is limited to the tonsils and fauces generally.

12th. BRONCHLEMMITIS-MEMBRANIFICA, by which is intended that perfectly specific inflammation of the lining membrane of the larynx, trachea, and bronchiæ which has been named coriaceous, pellicular, or diphtheritic by Dr. Bretonneau of Tours. Under this denomination, I mean to include as varieties merely, 1st. Good's *Laryngysmus-stridulus*, which differs from the subsequent in its much greater mildness, and in its near approach to a catarrhal affection of the lining membrane of the trachea; 2d. Good's *Bronchitis*, or, as he has last named it, *Bronchlemmitis*, which is ordinary *Croup;* and, 3d. Good's *Laryngitis*, which differs from the preceding only in being seated principally in the larynx, and consequently in being much more urgent and more immediately dangerous, on account both of the structure and functions of the part affected.

In BRONCHLEMMITIS-MEMBRANIFICA v. LARYNGYSMUS, Sanguinaria, as a general rule, may be almost exclusively relied on for its cure. Full vomiting at the outset, with this article, the process to be repeated as often as the symptoms may require, if it should be half a dozen times a day, and in the intervals, its free employment, (in conjunction with Camphorated tincture of Opium) as a deobstruent and counteragent, is perhaps all that will be necessary for nine tenths of the cases that occur. In the earliest stages of BRONCHLEMMITIS-MEMBRANIFICA v. TRACHEITIS, free vomiting with Sanguinaria may be considered as very nearly a specific, at least for all ordinary cases. The quantity of the medicine, however, which is necessary to produce sufficient vomiting in

this form of the disease, is greater than will be found necessary in almost any other complaint. When the symptoms are immediately urgent, and when there is great insusceptibility to the impression of ordinary medicines, it will often be necessary to use the Per-Sulphate of Mercury in conjunction with the Sanguinaria, or if this is not at hand, the Per-Sulphate of Copper, or even the Sulphate of Zinc. It should be remarked, that the two last, however valuable they may be in comparison with Antimony, are nevertheless inferior in efficacy to the first. In this disease, as in many others, it is not so much the evacuation, nor even the concussion necessarily produced in vomiting that is of the greatest service, as it is the specific impression upon, and the change of condition in the diseased structure, which the peculiar article employed as an emetic produces in addition to its more obvious operative effect. I think it may be considered as settled beyond a reasonable doubt, that the vegetable acrid-narcotic and deobstruent emetics, as well as the mineral sub-tonic ones, are always greatly preferable in this disease to the refrigerant, as Antimony for example, since they much more effectually counteract morbid actions and conditions, and are in no danger, when properly managed, of occasioning subsequent exhaustion or excessive morbid irritability. Besides, the supposed specific operation of Sanguinaria upon the whole pulmonary system, and its general power of resolving atonic acute and sub-acute inflammations, give it a preference in Croup perhaps over every other article, unless it is the Proto-Chlorid of Mercury. In all probability likewise, its acrid-narcotic powers are of considerable service in this complaint. As the Per-Sulphate of Mercury, for a general rule, is a much more active and speedy emetic than Sanguinaria, some judicious practitioners place their whole reliance upon this, and do not employ Sanguinaria at all. This salt doubtless acts efficiently upon the whole secernent and absorbent system, and being a mercurial, is peculiarly adapted to relieve membranific inflammation, so that this practice is undoubtedly good; but, as the result of considerable observation it is my own opinion, that it is still better to make Sanguinaria the basis of the emetic, and therefore to give several doses of it before the mercurial emetic is entered upon. In less urgent cases, there are various other articles which it is often useful to conjoin with Sanguinaria to assist its emetic operation, the best of which are the Proto-Chlorid of Mercury and the Polygala-Senega. To the Scilla-maritima, which is so frequently employed, there is but one objection, and that is its great liability to leave the stomach

and bowels in an irritable and disordered state. Even Cephælis-Ipecacuanha will sometimes be serviceable to occasion a commencement of the vomiting, after repeated doses of Sanguinaria have been taken without this effect. Unless previous exhaustion prevents, the vomiting should be pushed to such an extent in the beginning of this disease, as to remove that *peculiar, heavy, glairy substance*, which is always secreted from the inner surface of the trachea, and which at a subsequent period probably constitutes that membrane, which is so generally supposed to be essential to the disease, and the evacuation of which is, for the most part, so speedily followed by relief of all the most urgent symptoms. It would be irrelevant to the subject of this Essay, to enter minutely into all the treatment proper for Croup. In this place it is sufficient to say, that during the progress of the disease, at least when it is well treated in other respects, Sanguinaria, perhaps in conjunction with Senega, should be sedulously administered, at stated intervals, in as large doses as the stomach will bear without nausea; and if, notwithstanding this course, paroxysms occur, vomiting with these articles will be occasionally proper. It ought to be particularly observed, however, that the propriety of this management will depend greatly upon the accompanying treatment; and that beyond most other diseases Croup certainly requires a proper combination of suitable adjuvants with what may be considered the principal articles. The quantity of emetics, deobstruents, cathartics, etc. which is usually necessary in severe Croup to produce a given effect, even in children of six months, and much more in those of five years of age, is often incredible when compared with the ordinary doses for adults. This is peculiarly the fact, not only with Sanguinaria, but with emetics generally, and also with the Proto-Chlorid of Mercury. A drachm of the last in twenty-four hours, with a proportional quantity of Sanguinaria, constitutes rather light practice for some cases that are not of unfrequent occurrence.

It is always to be supposed that the physician who can treat a severe and obstinate case of disease successfully, will have sufficient discretion and judgment to adjust his practice to the milder forms. Whenever therefore I enforce energetic practice, it must be considered as intended for such cases only as from the urgency of their symptoms imperiously demand it. From the mere name of a disease no opinion can be formed of the requisite strength and decision of the proper treatment. A moderate case of this disease often yields to

vomiting with Sanguinaria alone; and indeed in some instances it may be so managed, as to effect a cure without even the production of emesis.

The preceding method of employing Sanguinaria in Croup, I repeat, is adapted to the ordinary regular and severe cases. It must not be forgotten that there are a few examples of this disease that are so extremely atonic and sunken, as at their very outset to forbid the use either of emetics or cathartics. Very happily, in a majority of these cases, it does not seem to be possible to produce either vomiting or purging, at least by any ordinary means; but when either is produced the patient commonly dies in the operation. In these instances the constitutional affection is the very worst grade of Typhus-syncopalis. As similar cases of simple fever require a particular attention to the process of support, so it forms the main indication when the disease is nosologically Croup. But even here the Proto-Chlorid of Mercury and Sanguinaria, in deobstruent doses, if assisted by a sufficiently free use of Opium, Alcohol, and perhaps epispastics, seldom fail of entirely relieving the affection of the trachea. The ultimate recovery of the patient will then depend principally on our success in avoiding evacuations and reduction, from these agents, and on the degree to which we are able to rouse the powers of the system, by appropriate excitants. These are believed to be the cases in which theorists suppose that there are contradictory and opposing indications; but this is a great mistake. Such Phlogotica require nothing but counteraction and support. In the sequel, some further remarks will be made respecting this disease.*

* Croup is a disease in which Dr. Bird, in strict conformity with the notions of Dr. Francis, who was so kind as to favour him with a letter upon the subject, has theorized Sanguinaria out of use, except in that stage of the complaint in which the patient, to use the language of Dr. Francis is in a "*hopeless condition.*" But even here,—strange to tell,—neither Dr. Francis, nor Dr. Bird are disposed to place much reliance on it! The world is assuredly under great obligation to Dr. Bird for the favour of Dr. Francis's opinion on this subject. This gentleman, it is true, does not appear ever to have used Sanguinaria, or even to have seen it used in Croup,——but what of this? His theoretical opinions upon an article that he has used once, in the form of tincture, in doses of twenty-five drops, three times a day, in an entirely different disease, will doubtless outweigh half a century's experience to the contrary of some of the most judicious practitioners of a neighbouring state,—and especially twenty years' experience of such a man as Professor Ives of Yale-College, a gentleman who has no other qualifications to enable him to profit by observation and practice, with respect to such an article, than consummate talents and learning, and, in all probability, the most extensive and thorough knowledge of indigenous materia-medica of any physician in the United States.

13th. CATARRHUS-COMMUNIS ET EPIDEMICUS, or *common* and *epidemic Catarrh*, both of which consist essentially in a peculiar, and doubtless specific atonic inflammation of the Schneiderian and bronchial membrane, accompanied with a constitutional febrile affection, which is likewise atonic, and mostly of the nervous type, though perhaps occasionally of a synochous or sub-putrid character. In the first stage both of common and epidemic Catarrh, Sanguinaria, either as an emetic, or freely used as a deobstruent, is often capable of producing a complete resolution, and that without any expectoration. At a little later period, it accelerates that mucous, or muco-purulent excretion, which seems to be the natural method in which the disease is spontaneously resolved. In the latter stages, where this secretion has become chronic, and when it is kept up by habit, in connexion with a lax and irritable condition of the mucous membrane, Sanguinaria in deobstruent doses, and in conjunction with Opium, is usually so effectual in changing the morbid condition of the secernent and absorbent vessels of the lungs, as to be perfectly adequate, in most cases, to a cure of this state of the disease.

14th. PNEUMONITIS-TYPHODES V. NOTHA, or that form of Pneumonitis, in which the pulmonary inflammation is neither erythematic, nor of the common phlegmonous or suppurative sort, but yet passive or atonic; that form in which the inflammation is confined to the bronchial membrane, but accompanied with more or less paresis of the nerves of the lungs, and more or less engorgement of the vessels of the lesser circulation; and finally, that form in which the constitutional affection is always a non-malignant Typhus of the pure nervous type.* In this disease, many practitioners of extensive experience, and unquestioned judgment, place their principal reliance upon emetics, for the relief of all the most urgent symptoms, except barely exhaustion. When there is severe pain, an emetic usually gives immediate relief; when there is great torpor and inirritability, or a paresis or sub-paralysis of the lungs, an emetic often speedily obviates this condition; and when the patient is threatened with suffocation from serous effusion into the bronchial cells, the readiest, and the most effectual remedy is an emetic.

* In this, and the two subsequent forms of Pneumonitis, I have designated the cases which I intend, by their anatomical characters principally, because these were the most brief. It is proper to remark that the anatomical characters in question have been determined accurately, by frequent *post-mortem* examinations, and that the several sorts of cases to which I refer, have been common in various parts of Connecticut, and may always be easily distinguished by their external symptoms. I need not add that this distinction is absolutely necessary, for their best treatment.

Emetics are often also of great service in changing the quality of the secretion from the mucous membrane, when it is ill-conditioned; and they are likewise capable of exciting it, in many instances, when it is deficient, and of restraining it, when excessive in quantity. One circumstance alone contraindicates their use, and that is considerable exhaustion; but even in that condition, those practitioners who know how to manage emetics with the greatest dexterity, and, at the same time, understand equally well how to support the powers of life, and to meet promptly every symptom of declension and failure, can accomplish highly valuable purposes with them. Emetics may be employed, either at the outset, or during the progress, or towards the close of this disease, or, in one word, at any stage in which the indicating symptoms occur, without the contraindicating in conjunction. From the peculiar combination of properties which Sanguinaria is well ascertained to possess, I have good reason to believe that no other emetic is so well adapted to this disease, and from considerable personal observation, as well as much testimony, I am fully persuaded, that while it is actually effecting the operation of emesis, it is, at the same time, exerting a greater deobstruent, counteracting, or resolvent power upon the disease, than any other known article is capable of producing. As in Croup however, so in this disease, it may be often useful to accelerate or increase its emetic effect by the Per-Sulphate of Mercury, the Per-Sulphate of Copper, the Sulphate of Zinc, or even Cephælis-Ipecacuanha. But, it must be again remarked, that these articles alone, though they may vomit to an equal extent, and prove highly serviceable, are nevertheless of inferior efficacy, on the whole, to Sanguinaria. In the intervals between the employment of emetics, (provided the disease is thus treated) Sanguinaria, under different management, will likewise be found valuable, as a deobstruent, alterative, or counteragent. For this purpose, it must be given at regular and short intervals, in as large doses as the stomach will bear without disquiet, and be continued, in this manner, till the disease yields, provided the case is a curable one. When Sanguinaria is employed in this method, it will generally be necessary to combine it with a greater or less quantity of Opium; and it will be proper, likewise, to administer, in conjunction, other remedies, particularly the Proto-Chlorid of Mercury in the early stages, and in the latter, exciting and supporting agents, as the symptoms and circumstances of the case may require. The power of Sanguinaria to subdue and resolve atonic acute, and sub-acute inflammations, is perhaps its most important medicinal property.

15th. PNEUMONITIS-TYPHODES V. ERYTHEMATICA, or that variety of Pneumonitis in which the pulmonary inflammation is of the erythematic sort, but varying through a considerable range, from those cases which may be denominated *phlegmonoid*, to those which are *sub-gangrænous* at their very commencement; a variety in which the inflammation is confined to the bronchial membrane, but accompanied with more or less paresis of the nerves of the lungs, and more or less engorgement of the vessels of the lesser circulation: and in which the constitutional affection is always a Typhus of the putrid type, but, in correspondence with the grade of the local affection, varying through a range, of which one extreme constitutes what is often called a Synochus, while the other is often the lowest and most malignant Putrid-Fever. In this form of Pneumonitis, emetics are even of more importance, than in the last, and Sanguinaria has an equal preference over every other article. The same general symptoms and circumstances, as far as the same occur in the two varieties, afford indications and contraindications for this practice. As a general rule, however, a freer use of it is required, in the least atonic form of this variety, and it may likewise be considered as much less admissible in the most sunken, and most malignant cases. The same auxiliaries are also not unfrequently required. As a deobstruent, alterative, or counteragent, Sanguinaria is likewise of equal value in the least atonic cases of this variety as of the preceding, but suitable auxiliaries are much more necessary, and particularly a liberal use of the Proto-Chlorid of Mercury. Here Digitalis is often a highly valuable adjuvant to Sanguinaria. In its most typhoid and putrid shape, this variety of Pneumonitis usually bears evacuations of all sorts, exceedingly ill; but even here, vomiting with Sanguinaria, if accompanied and followed with efficient support, is usually admissible, whenever it is highly indicated by any particular symptoms. As a deobstruent, &c. Sanguinaria is oftener useful in this grade of disease than as an emetic, but then it is necessary to accompany it with a liberal use of Opium, Wine, Alcohol, Cinchona, or some other exciting, supporting, and invigorating articles.

The method of treating these two varieties of Pneumonitis by emetics of Sanguinaria, as just described, I trust, will always be found to be highly successful, in most, if not in nearly all the cases which are curable by any known means. It is certainly very greatly preferable to the employment of depletion, Antimony, and Squill; so much so, that I am confident no practitioner who has ever had opportunity to witness the comparative success of each, and that under the best management of

which they are both susceptible, will hesitate to prefer the former, or indeed, will ever again employ the latter. Still, for all ordinary instances of both these varieties of disease, I think there is another, and a different method of employing Sanguinaria, which, at the least, is attended with an equal degree of success, and in some cases, I believe, with a greater; a method which requires somewhat less dexterity and vigilance, which is less liable to inconveniences, and which therefore justly deserves the preference. On the plan to which I refer, vomiting is entirely dispensed with, except to meet some particular unessential and accidental symptoms, and the deobstruent use of Sanguinaria, with proper auxiliaries is mainly relied on. Let us suppose, as often happens, that the case is painless at its outset, or, at least, only moderately painful. Under these circumstances, an epispastic should be immediately applied, a full dose of tincture of Sanguinaria (that is, as much as the stomach will retain without vomiting, which, at the beginning will ordinarily be about a fluidrachm) and a moderate dose of the Proto-Chlorid of Mercury (say from three to five grains) are to be immediately administered. The lower extremities are now to be bathed in warm water, and diaphoretic regimen is to be employed. In half an hour, as a general rule, and, at farthest, in an hour, twice the quantity of Sanguinaria is to be repeated. If this is not rejected, (and there is no probability that it will be, in any ordinary case) the dose is to be again doubled in another half hour, or, at most, in an hour. If there is still no vomiting (which is not commonly to be expected) sometimes even very near half ounce doses, or, at all events, as much as the stomach will receive without rejection, be the same more or less, are to be repeated every hour, for the next six hours, and, according to circumstances, to be continued in less doses, every two or three hours, for the next two or three days, unless a resolution, or some prominent change in the condition of the disease should render it either unnecessary, or improper. The Proto-Chlorid of Mercury is to be regularly continued from the commencement, in about the same doses as the first, and at intervals of about three hours, till free, but by no means drastic, or excessive catharsis takes place. After this, it is to be discontinued, and a moderate quantity of tincture of Opium is to be thenceforward given along with the Sanguinaria. Let not this part of the practice be omitted, under the idea that it is either unnecessary, or can be injurious. It is important not only to prevent irritability of the stomach, but to assist the resolution of the complaint.

If the case is highly painful at the outset, it will then be best

to administer a single full and free dose of the Proto-Chlorid of Mercury at the commencement, with sufficient Opium to allay the pain, but still to employ the Sanguinaria as before directed. It will likewise be proper thenceforth to continue the use of the Opium, in conjunction with the Sanguinaria; just as if catharsis had actually taken place. At all events, a sufficient quantity is to be administered, not only to subdue, but to keep under all pain. If the bowels are not well cleared, in the course of twelve or fifteen hours from the beginning of this treatment, it will be necessary to use Castor-oil, or some other mild, but effectual article, in order to ensure proper catharsis. The use of the Sanguinaria is to be continued, as in the first described case.

No person who has not repeatedly witnessed the operation of this course, will be at all likely to credit in how great a proportion of cases, it is capable of producing a complete resolution of the disease, within the period of one, two, or three days; nor can any man realize to what a trifling disease in point of severity it will reduce most of the cases, which it does not actually resolve, in the manner specified. Those only who have witnessed the sudden and extraordinary power of Colchicum, in resolving many cases of atonic acute Rheumatism, will be likely to form any conception of it. Still we must beware of doing such injustice to the advocates of this method, as to imagine that they make any pretensions that it is capable of curing all cases. A certain proportion of all severe acute diseases, under ordinary circumstances, will probably always be found incurable, and that under any and every method of management; but the fatal cases will unquestionably be found to be considerably less numerous, under some plans of treatment, than under others. There is one circumstance, from which, on mere superficial attention, there will be great liability to do injustice to this plan, and that is the circumstance that it produces a complete resolution in the early stages of so many cases, and in so many of those which are not resolved, occasions such a mitigation of all urgent symptoms. Without having had opportunity to witness the comparative effects of a different mode of practice, not only in the same disease, but also in the same epidemic, and even in the same place, a mere common looker-on might be inclined to believe that the practitioner who employs the method in question, has a much more moderate disease to treat, and a much less number of cases, than is the real and actual fact. From these same sources of fallacy, it not unfrequently happens, that the worst method, and the most unskilful practice, gets the greatest credit with the unprofessional public, and even with physicians at large, when they place reliance on popular report. But care-

ful comparative observation of the two methods, at the same time, in the same place, and in the same epidemic, and much more, a thorough and skilful trial of both, by the same practitioner, can leave no question —— tests, it is true, of which the public can never have the benefit.

To those who have been in the habit of using tincture of Sanguinaria only in doses of twenty or thirty minims, and at intervals of four, six, or eight hours, and even in this way, have customarily seen it offend the stomach, the free use which I recommend may seem either impracticable on the one hand, or hazardous on the other. It is not pretended that the freedom here recommended, is proper in every case, but only in the majority of those just specified. There is now and then a peculiarly irritable subject, either from some peculiarity in temperament, or in the disease, upon which Sanguinaria cannot be thus employed; but these temperaments, and these cases, are far less numerous than is commonly imagined. Greater severity in a particular case of a given disease, as is well known, may make a very material difference in the susceptibility of the patient, though there is reason to believe that the previous treatment makes much more; —— but on this point it is sufficient to refer to the fact heretofore stated, and the explanation attempted, that in certain acute diseases, a dose of two or three fluidrachms of the tincture of Sanguinaria, will frequently set well upon the stomach, when perhaps thirty minims might nauseate, and be rejected. But suppose a given dose of Sanguinaria is so large as to vomit, in this disease. It will only be an adoption of the emetic plan, which has been more commonly employed than that which I have been detailing, and is unquestionably a very good one. The next dose can be reduced, without any difficulty, to the proper deobstruent quantity, and no harm can possibly be done. It is proper to remark that this method is more especially recommended in non-malignant cases. In a modified form, it will doubtless be more or less applicable to some few malignant ones; but it would be out of place in this Essay, to give particular directions for the treatment of such cases.

16th. Pneumonitis Typhodes v. syncopalis, or that variety of Pneumonitis, in which the pulmonary affection is neither common phlegmonous, nor erythematic inflammation, but an affection *sui generis*, and in all probability a perfectly specific inflammation, one which is confined to the bronchial membrane, though accompanied with a very considerable degree of paresis of the nerves of the lungs, and a considerable engorgement of the vessels of the lesser circulation, and of which the constitutional affection is a perfect Typhus-syncopalis. In the limited

number of cases of this form of disease, in which emetics are indicated, Sanguinaria is believed to have the same preference over other articles, as in the preceding varieties; but, as a deobstruent, its utility even in *any* decided case of this complaint, is at least doubtful. On this subject, however, I have never had any considerable opportunity of observation, and have been still less in the way of obtaining satisfactory testimony. In the worst cases of this complaint, the patient is usually greatly beneath the range of susceptibility to such an article as Sanguinaria, and commonly requires but little else than the most decisive support.

17th. Pneumonitis-sub-acuta, the *idiopathic Phthisis-Catarrhalis* of Duncan and Good, which is an atonic inflammation of the bronchial membrane, specifically distinct from the common, suppurative, or phlegmonous sort, but approaching very near to, if not actually identical with the Catarrhal. The constitutional or febrile affection which attends the first stage of this disease is atonic, and of the nervous type, becoming, however, in the secondary and Chronic stages a true and exquisite Hectic.

At its outset this is an insidious affection, often mistaken for common Catarrh, but which, under an exclusive depleting, evacuating, refrigerant, or, in one word, antiphlogistic or reducing treatment, very soon displays its true Phthisical character, and very certainly proves speedily fatal; though under a different and more judicious plan, it may be arrested and resolved with more certainty than almost any other acute or sub-acute disease of the lungs. Even at a considerably advanced stage, and at a later period than in any other form of Phthisis, it may, by proper means, be treated with perfect success, and the patient be completely restored. At any rate, whether this disease shall follow the same laws as the acute bronchial Pneumonitides, or whether it shall be protracted to a lingering and dangerous, if not a fatal disease, depends wholly upon the early treatment. At its very outset, it may often be completely broken up by an emetic of Sanguinaria, followed by Opium in regular doses and at stated intervals, or perhaps better by a free use of Sanguinaria as a deobstruent merely, but still with Opium. But however important Sanguinaria may be in the early stages of this disease, it must not be forgotten that Opium is equally necessary as an auxiliary, and often likewise rubefacients, vesicatories, etc. externally. In the secondary and hectical stages, it must be observed that Opium is of primary importance, and Sanguinaria only an auxiliary; and that tonics and restoratives are then necessary also to a cure. Should emetics be indicated in the

secondary, as well as the primary stages of this disease, Sanguinaria is one of the best that can be selected.

18th. PNEUMONITIS-APOSTEMATOSA, or *Phthisis-apostematosa* of Duncan and Good, which appears to be essentially an obscure and insidious chronic, or occasionally sub-acute atonic inflammation of the parenchyma of the lungs, of the common suppurative or phlegmonous sort. The constitutional febrile affection of the first stage, is usually so obscure as to escape notice, but it seems always to be perfectly atonic, and of the nervous type. As is invariably the fact in the suppurative stage of all inflammations, the fever becomes Hectic when an abscess is formed. In the very forming stage of this variety of disease, emetics of Sanguinaria, or a free deobstruent use of it, will almost always produce resolution, especially if accompanied with epispastics, and followed by opiates, or by Conium and Iron.

19th. PNEUMONITIS ARTHRITICA, or *Arthritic Pneumonitis.* This disease, when idiopathic, is a misplaced rheumatic or gouty inflammation, which is seated in one or more of the pulmonary textures, but in which particularly I am ignorant, having never had an opportunity of examining such a case anatomically, and, contrary to the general rule, it is perhaps not practicable to decide from the symptoms alone. When this form of Pneumonitis occurs without having been preceded by any rheumatic or gouty affection of the extremities, (the only circumstances under which it can with propriety be considered idiopathic,) an accurate diagnosis is peculiarly important. Such a diagnosis may always be made by a strict attention to the constitutional affection, which is always a fever of the arthritic type; and in the progress of the disease, by the course and termination of the local affection.*

* As the characteristics of the arthritic type of fever are not specifically pointed out, by any author now within my recollection, it may perhaps be proper, though foreign to the general plan of this Essay, to give a very concise summary of them in this place. Arthritic fever is always irregularly periodical, or, in other words, exacerbating and remitting; it is always accompanied, at least, by paroxysms of profuse sweating; there is great frequency and quickness of the pulse, and, in short, a peculiar irritability of the whole system; and when neglected, or ill-treated, great liability to be extremely protracted. The local affection, or, in other words, the inflammation is peculiarly liable to sudden metastases, and it never suppurates, though it is sometimes followed by a peculiar effusion into the cellular substance, which, however, is almost always absorbed, sooner or later. The diathesis of the disease is sometimes phlogistic, and sometimes atonic, but even when it is the most phlogistic, it is incapable of being speedily, if ever cured by depletion, evacuations, and refrigerants alone, but always requires that the proper reducing means should be immediately followed by deobstruents, opiates, and usually Cinchona, a course which would not be tolerated by those Phlogotica, in which the local affection is common

If this disease happens to be phlogistic, the use of Sanguinaria must be preceded by adequate depletion, and purging with the Proto-Chlorid of Mercury; but as this is very rarely the fact at the present day, the first of these processes, instead of being necessary, will usually be injurious. In atonic cases, it is usually expedient to commence with an emetic of Sanguinaria. If this does not effectually relieve the pain, and other urgent symptoms, it is to be immediately followed by such a quantity of Opium as will accomplish this purpose, together with as free a use of Sanguinaria in deobstruent doses, as the stomach will bear without disquiet, and, when the general atony is not too great, which in all probability will rarely be the case, a sufficient quantity of the Proto-Chlorid of Mercury is to be given, in conjunction with these articles, to clear the bowels in the course of twelve or fourteen hours at furthest. When the emetic of Sanguinaria pretty effectually relieves the pain, and the other urgent symptoms, considerably less Opium will be subsequently necessary, but its use is not to be altogether omitted, since it will always greatly assist the beneficial deobstruent effects both of the Sanguinaria and the Proto-Chlorid of Mercury. Epispastics are to be employed in all cases from the very outset. Under this plan, it is seldom that after the first twenty-four hours, any other remedies than Sanguinaria and Opium will be necessary. If, however, there is much weakness or exhaustion, Cinchona, Wine, and even Alcohol, are by all means to be employed.

I am acquainted with no observations upon the effects of Sanguinaria in PNEUMONITIS-CAUMATIDES, or that sort of Pneumonitis in which the inflammation is of the common, suppurative, or phlegmonous sort, and affects equally the bronchial membrane, the parenchyma of the lungs, and the pleura—an inflammation which is unattended with any paresis of the pulmonary nerves, and probably also, with any engorgement of the vessels of the lesser circulation, but is of a truly entonic character, and is always accompanied by a genuine Cauma, as a constitutional affection. It may be considered as well established, that this disease does not admit of vomiting, a circumstance which excludes one use of Sanguinaria; and from the general laws of the disease, and the known operative effects of this ar-

suppurative inflammation, and the constitutional febrile affection a true Cauma. The symptomatic cases, or those in which there has been a retrocession of rheumatic or gouty inflammation from some of the extremities, are substantially the same as the idiopathic, except that such retrocessions do not usually take place till the vital powers of the system have been, in some way or other, considerably exhausted.

ticle, it is evident that it cannot be administered as a deobstruent previous to the freest depletion and evacuations. Even subsequent to these processes, I cannot but conclude from analogy, that Sanguinaria would be injurious rather than beneficial.

In PNEUMONITIS MEDITERRANEA VEL TROPICA, described by Dr. James Johnson, and other writers on tropical diseases,—a Pneumonitis in which the inflammation is also of the common, suppurative, or phlegmonous sort, and likewise affects equally the bronchial membrane, the parenchyma of the lungs, and the pleura,—an inflammation unattended with any paresis of the pulmonary nerves, and probably with any engorgement of the vessels of the lesser circulation, but which, if there is any judgment to be formed from the symptoms, and the effects of treatment, as well as the laws of the access, progress and event of the disease, is of an unquestionably atonic character, and is always accompanied with a true Typhus, of a moderately nervous type, as a constitutional affection, it is highly probable that Sanguinaria might be useful. Whether vomiting is ever of any service in this disease, I am altogether ignorant; but the freest use of the Proto-Chlorid of Mercury, as a deobstruent, in conjunction with Opium and epispastics, have, hitherto, constituted its most successful treatment. To this course, I strongly suspect that Sanguinaria would be a good auxiliary. But let it be particularly noticed, that these remarks with respect to the probable operation of this agent, both in PNEUMONITIS-CAUMATODES and PNEUMONITIS-TROPICA, are the result of mere analogical reasoning, and not of actual and repeated trial and experience, as with the other forms of Pneumonitis.

20th. ARTHRITIS-ACUTA V. ATONICA, or *atonic acute Rheumatism.* In this disease, Sanguinaria is a peculiarly valuable remedy, in my view, affording relief in the same manner, and upon the same principles, as Colchicum and Veratrum, which, I have no doubt, operate beneficially upon this disease by virtue of their deobstruent, rather than their evacuating powers. Comparing my own experience of the utility of Sanguinaria, not only with similar experience in regard to these articles, and with the amount of all the testimony in their favour, I am inclined to believe that it possesses about equal efficacy, though perhaps not equal speed, while it is much more convenient and manageable. Its proper dose, however, is considerably larger, and, as a general rule, a much greater quantity must be taken in the course of the twenty-four hours, in order to insure equal relief. At all events, in those cases with which I have been conversant, nothing could be accomplished by doses of twenty or thirty drops of the tincture, at intervals of six or eight hours.

Those instances in which such small quantities of simple Sanguinaria have removed acute Rheumatism, must have been originally extremely moderate cases. They might indeed have been obstinate, unyielding and protracted, under the depleting, evacuating and refrigerant plan, which, in general, is so indiscriminately adopted at the present day, and which seems to be prescribed merely to the name of the disease. The truly severe, and at the same time atonic cases, to which I have reference, are not, on the one hand, relieved in the least, by such small quantities of Sanguinaria, and on the other, under a decisive reducing treatment, they only make a constant and regular downward progress toward the grave. In any urgent case, with a proper quantity of Opium, few patients will find any difficulty, in taking the tincture of Sanguinaria, in doses of a fluidrachm, or even more; and if the symptoms are very severe, this quantity may be repeated every two hours, or even every hour. These articles may be entered upon, in most cases, at the very beginning of the disease, but in very many instances, however, it will be useful to accompany them with such a quantity of the Proto-Chlorid of Mercury, as will insure free catharsis, after twelve or fifteen hours, or, occasionally better, perhaps, with Elaterium, to be managed as in Dropsy, only continued somewhat longer, on account of the retardation of its operation, which the Opium will occasion. Under this course, an entire resolution of the topical part of the disease is usually produced, in the course of about three days, and, in a great majority of cases, of the constitutional febrile affection likewise. When the fever continues longer than the local affection, this likewise may generally be resolved, by appropriate treatment with Cinchona, etc. in seven, or, at farthest, fourteen days. Moderate cases of atonic acute Rheumatism may often be immediately arrested, and completely cured, by Sanguinaria alone. When Sanguinaria is employed with any considerable freedom, in this disease, it always greatly improves the secretions from the stomach and liver, which, perhaps, are invariably more or less deranged and vitiated, at the outset of the complaint. In this place, it is proper to remark, that under seasonable, appropriate, and efficient management, *acute Rheumatism* may be as often brought to its final crisis, on the fourteenth day, as a common Typhus, and not unfrequently, on the seventh. In no disease of such frequent occurrence, is the common management recommended in books, so defective as in this.

21st. ARTHRITIS SUB-ACUTA, or *sub-acute Rheumatism.**

* As this form of Rheumatism is not very accurately distinguished by authors, though under my observation it has always presented a pretty uni-

In the sub acute variety of Rheumatism, the treatment may, in general, be advantageously commenced with an emetic of Sanguinaria, which will sometimes produce a perfect resolution of the disease, though there will remain a great liability to relapse, unless the emetic is followed by a free use of Cinchona, for a considerable time. When there are objections to the employment of the emetic, it may be remarked by the by, that it is perhaps the next best measure, to commence with a cathartic of Elaterium, to be managed as in Dropsy. Sometimes, undoubtedly, it may be proper to employ both measures in succession. If the disease does not yield to these processes, it will then be necessary to enter upon a thorough deobstruent course of Sanguinaria, assisted by an equally thorough use of Actæa-racemosa, and Opium, according to the degree of pain and restlessness. In the secondary stages of protracted cases, a free use of Conium, Capsicum, and Iron, is often highly serviceable. Although the course here recommended is an efficacious one, yet where the patient is naturally vigorous and robust, and there is no very considerable atony or debility, either from the disease or any other cause, it is perhaps a speedier, a surer, and therefore a better plan to begin with a thorough and decisive use of Colchicum and Opium, and follow it with Cinchona. This latter method is however more liable to be succeeded by inconveniences. The great difficulty with this disease is that there is seldom sufficient urgency of symptoms, at any one time, during its early stages, to induce the patient to submit to any very thorough, or decisive measures, and under mere palliative ones,

form character, and possessed strongly marked peculiarities, in comparison with genuine acute Rheumatism, it may be useful to remark, in this place, that it may always be discriminated by the circumstances, that in the sub-acute sort the attack is gradual and insidious, and the local affection always precedes the constitutional for several, and often many days; whereas, in the true acute sort, the attack is sudden, and the local and the general affections are nearly, if not entirely simultaneous. In *sub-acute Rheumatism*, the symptoms are much more moderate, and the disease in general has much less urgency. The fever occurs by paroxysms, which are usually irregular, as to their degree and duration, and these are frequently very near, if not quite perfect intermissions, but still without any material variation of the local affection. The local affection is always indicated by tumefaction and soreness or tenderness, as well as pain, but in a much less degree than in the acute sort. Except from mere lameness, the patient might be able to walk about during the greater part of this complaint, whereas, in the acute sort, he is usually immediately confined to his bed. There is great liability to metastases of the local affection, in both sorts, but considerably less in the sub-acute than in the true acute sort. Under neglect, or ill-treatment, this is liable to become a severe and obstinate complaint, but by a judicious course, it may, at least, be always prevented from degenerating into any thing worse than the disease itself, in its natural state, and it may ordinarily be cured, in the course of a fortnight, with great certainty.

the complaint is liable to be lingering, though, if nothing injudicious is done, it will seldom degenerate under their employment.

22d. ARTHRITIS-CHRONICA, or *chronic Rheumatism.* In recent cases of chronic Rheumatism, emetics of Sanguinaria are, not unfrequently, useful; and in such instances, Sanguinaria may usually be beneficially employed afterwards, as an auxiliary to a proper course. As a general rule, however, not much is to be expected from this article, in chronic Rheumatism of any considerable duration.

23d. ARTHRITIS PODAGRA, or *Gout.* Gout is of such rare occurrence in that section of the country with whose diseases I have hitherto been conversant, that I am unable to say I have ever given Sanguinaria a sufficient trial to be able to decide from experience respecting its general adaptation to this complaint, or, indeed, to say any thing of the degree of power, which it may be capable of exerting, in particular cases of this malady. From the perfect similarity in the deobstruent effects of Sanguinaria and Colchicum, not only in acute Rheumatism, but in a variety of other diseases, and from the known operation of Colchicum in Gout, I think there can be no reasonable doubt of the powers of Sanguinaria in this complaint. Indeed, from the circumstance that it is destitute of the evacuating powers of Colchicum, it must be more extensively applicable, and capable of being employed in a much greater proportion of the various cases that occur, than Colchicum. So great a degree of atony often exists, in many cases of Gout, as to forbid the use of Colchicum, but rarely so much as to contraindicate Sanguinaria, especially when accompanied with suitable auxiliaries. In several well marked cases of Podagra-larvata, or disguised Gout, (the Podagra-atonica of Cullen,) I have known a free and continued use of equal parts of tincture of Sanguinaria and camphorated tincture of Opium, restore the patient to customary health, and that after no very long time.

It will be recollected, that at the conclusion of the introduction to this Essay, some remarks have already been made on the application of the deobstruents generally, to the treatment of the atonic Phlogotica, and more especially to some species of Arthritis. To these, the attention of the reader is again requested, and in this particular connexion. In the mean time, a few additional remarks upon the same subject may be expected in the sequel.

24th. DYSENTERIA-ACUTA ET CHRONICA, or *acute and chronic Dysentery.* Sanguinaria has been strongly recommended both in acute and chronic Dysentery. My first im-

pression respecting this practice, was extremely unfavourable, as I could not think that it promised much, if any thing, in a complaint of such a character. But on subsequent, and more particular consideration, I have been induced to change my opinion. Dysentery undoubtedly consists essentially in an inflammation of the mucous membrane of the lower intestines, sometimes extending to the upper, which, although perfectly specific, may nevertheless, like Croup and the specific inflammations which constitute several of the varieties of Pneumonitis-Typhodes, be capable of material modification, and even resolution, by a deobstruent which exerts such a powerful effect upon the secernents and absorbents generally. The power which is exerted on this complaint, by large doses of the Proto-Chlorid of Mercury, with Opium sufficient to prevent purging any further than just to carry off the medicine after twelve, or fifteen hours, is now well known. This power is unquestionably a mere deobstruent power, or one exerted upon the secernents and absorbents. Now why may not full doses of Sanguinaria, with Opium enough to allay all pain and irritation, and restrain all evacuations for the time being, be very nearly, if not equally as efficacious? Indeed, in low cases, I am inclined to think it possible, that it might even be more so, from the circumstance that it is not necessary that it should be succeeded by any evacuation, that would not otherwise be proper. No local irritation need be anticipated in this disease, from the acrimony of Sanguinaria, since it is not to be doubted, that all its effects would be produced by its primary impression upon the stomach, and through the medium of that organ, upon the secernents and absorbents generally, in precisely the same manner as the Proto-Chlorid of Mercury operates. Further analogies for the use of this article in Dysentery may be derived from the well known efficacy of Nitric-acid and Opium, in some cases of this disease, but more especially from that of the vegetable deobstruent *Baptisia-tinctoria.* The evacuating powers of this last article must however limit its use within narrower bounds than Sanguinaria. I have thus far considered Sanguinaria as probably capable of being useful, only by virtue of its deobstruent operation, though its narcotic power could hardly fail of being serviceable, for the purpose of allaying irritative heat and dryness of the skin, and irritation of the pulse, in those varieties in which the constitutional affection is what is commonly called a Synochus. In addition to this, when emetics are indicated in this disease, Sanguinaria, on account of its accompanying deobstruent operation, and on account of its not being liable to produce any material exhaustion of the vital powers during its operation, must, I

think, deserve the preference over every other article. From the well ascertained effects of the different preparations of Sanguinaria in other cases, I have scarcely any doubt, that in Dysentery, the tincture would be the most eligible form, and next to this the wine, and the infusion or decoction. In those cases in which Alcohol is not particularly indicated, in any shape, it is impossible that the small quantity of proof Spirit, (and this even still further weakened by having had a large bulk of so spongy a root as that of Sanguinaria, macerated in it,) that would be contained in the requisite doses, could be of the least disservice. On the contrary, it would probably be useful, by the slight carminative effects that it would be likely to produce. But a question respecting the utility of any individual medicine, in any particular disease, can never be decided by analogy, but by facts and experience alone. All I am able to say on this point is, that I have received some good testimony in favour of the efficacy of Sanguinaria in Dysentery, but have never tried it myself. The facts, however, of which I am possessed, together with my knowledge of the general powers of the article, and the analogies in its favour, I must confess, would lead me to its employment, in conjunction with Opium, as above specified, with very considerable confidence of success in its use. It ought to be added, that it will undoubtedly be found to be best adapted to that sort of Dysentery, which is accompanied with a fever of the synochous type; that in that sort which is accompanied with a Typhus of the nervous type, it will probably be useful; but in that form of the disease, in which the constitutional affection is unequivocal Typhus-syncopalis, I believe nothing but injury can reasonably be expected from it. These conclusions are drawn from a very frequent observation of its operation in other typhoid Phlogotica, and from an accurate knowledge of the effects of the Proto-Chlorid of Mercury in all the specified cases.

25th. LEUCORRHŒA COMMUNIS, or *common Leucorrhœa*, or *Whites in females.* Sanguinaria is said to have been occasionally employed with success, as an internal remedy, in Leucorrhœa-communis. It is well known to be the fact, that internal remedies are sometimes very speedily successful in some cases, while in others, the complaint will be obstinate, under every variety, both of general and local treatment. I can easily believe that by its powerful operation upon the secernents and absorbents, Sanguinaria may have cured some instances of this disease, but with respect to the comparative remedial merits of this, and various other articles more commonly employed in Leucorrhœa, I

have no experimental knowledge, having never employed it in any case of this sort.

26th. Blenorrhœa-Luodes, or *Clap.* It is said, that in many instances at least, Sanguinaria is capable of curing this disease. Since it has been so well known that Blenorrhœa-Luodes is remediable by the resins of Copaiva, Pinus-australis, Pinus-Strobus, &c. by oil of Pine, Cubebs, Lytta-vesicatoria, Capsicum, Sulphate of Zinc, and sometimes even by Gin, it is by no means incredible, that Sanguinaria should cure it also, especially as it is a medicine that exerts a more general, and a more powerful operation, not only upon the whole system, but also upon the viscera, and the membranes, when diseased, than many articles, whose efficacy in this complaint is well established, and as, in all probability, it is considerably more effectual than any one of the above mentioned agents, in resolving atonic inflammations. Whether it is the most convenient article for this purpose, is quite another point. As in several other cases, I have no personal knowledge —— no actual experience in its use in Blenorrhœa-Luodes, and therefore, cannot pretend to decide. Upon the whole, without further testimony in its favour, I shall continue to use in preference, such remedies as I have hitherto been in the habit of employing in this disease.

27th. Blenorrhœa simplex et chronica, or *benign Gonorrhœa* and *Gleet*, are both said to be capable of cure by Sanguinaria. I should suppose that any acrid-narcotic article, which is, at the same time, capable of acting strongly upon the secernent and absorbent systems, might remedy some cases of both these complaints. I have, however, never employed Sanguinaria in either, but I should imagine that the latter, in many instances, would be found much too obstinate, to be so easily got rid of. All I am able to say with certainty upon this subject is that by far the best remedy for the latter, with which I am acquainted, is an acrid-deobstruent, from the mineral kingdom indeed, but one from which I should have expected much less, *a priori*, than from Sanguinaria. As the article to which I refer, always requires the aid of Opium, so, I presume, it would likewise be a useful adjuvant to Sanguinaria.

28th. Punctura-venenata, or the *Bites and Stings of venomous insects and reptiles.* In those general but peculiar affections which take place suddenly from the bites or stings of venomous insects or reptiles, which, to be sure, are various, according to the insect or reptile by which they are produced, it is said that Sanguinaria has occasionally been employed with success. From the fact that such a great variety of pretended specifics for these affections is recommended by empirics, and

employed by the people, and that such a majority of the cases would unquestionably recover without any medication at all, regular physicians are commonly skeptical, with respect to the power of any known remedy for them, and usually sneer at the bare mention of one. This is a summary method of disposing of the matter, in all probability more satisfactory to the physician than to the patient. The truth is that even in those cases which might not terminate fatally, if left to themselves, or possibly not even amount to a very severe disease, there may be much benefit from judicious and appropriate medication. It is certainly an important object to palliate the distress of the sufferer, and shorten the duration of his disease, and much more especially to obviate all fatal tendency. From the most satisfactory testimony, and that too from experienced and judicious physicians, I have no doubt that a very free use of the Sub-Carbonate of Ammonia, and also *drenching* the patient with a strong decoction of Polygala Senega, Arabia-spinosa, and other similar articles, at the outset of the affection, does usually produce a speedy and powerful effect upon many of the cases to which I have reference, and especially such as are occasioned by the bite of the Crotalus-horridus, or American Rattle-Snake. Indeed, I consider it as beyond a doubt, that those agents which act at one and the same time upon the brain and nerves, the secernent and absorbent systems, and upon the stomach and intestines, and especially those which possess the additional power of acting as diffusible excitants upon the circulating system, and are besides sufficiently active to produce a strong impression, are invariably more or less serviceable in such cases. In the secondary stages of these affections, purely exciting remedies are believed to be generally beneficial, provided there are any urgent and alarming symptoms, since such cases, when they become dangerous, are invariably attended with considerable reduction of the force of the pulse, and much exhaustion of the powers of life generally, which symptoms, in fatal cases, gradually increase till death. Stimuli, instead of further exhausting the remaining excitability, as has been so confidently maintained, do, on the contrary, very obviously increase it, and apparently supply a *pabulum vitæ.* Wine, diluted Alcohol, Æther, Ammonia, saturated tincture of Capsicum, &c. taken freely, have all been manifestly advantageous. This method of practice is not modern, but has been recommended and approved, almost time immemorial. Celsus says that in such cases, "*necessarium est exsorbere portionem meri Vini cum Pipere; vel quodlibet aliud, quo calor movendus est;*" and Ægineta is reported to direct, "*dandum autem est edendum Piper aut*

Allium, et Vinum bibendum est," &c.* If the foregoing principles are correct, it can be easily seen how a free use of Sanguinaria may be serviceable in the early stages of such cases, though perhaps it may not be the best of all the articles that have been recommended. Of this, however, I am unable to speak with certainty, having never witnessed its operation in complaints of this sort. It may possibly be useful to know it, provided it possesses only an inferior degree of power in such affections, since they usually require that the remedy should be promptly, and speedily applied, and cases may occur, under circumstances where no more appropriate remedy is at hand.

29th. TRESIS-CAUSIS, or *Burns* and *Scalds.* I have recently been informed of what would seem to be rather an anomalous use of Sanguinaria, and that is, in Burns and Scalds, more particularly the latter, whenever the affection is so extensive as to require internal remedies. In these cases, as I am told, a physician of deservedly high reputation in Massachusetts, is in the habit of using tincture of Sanguinaria, in as large doses as the stomach will bear without disquiet, in conjunction with the requisite quantity of Opium, to keep the patient easy, which he repeats at intervals of two, three, or four hours, according to the urgency of the symptoms, and continues it till recovery. It is said that this compound much more effectually allays both general and local irritation, than Opium alone, and that its use very considerably accelerates the cure. Does Sanguinaria, in such cases, allay irritation, in the same manner, as in those Phlogotica, in which the constitutional affection is a fever of the

* In the American Medical Recorder, for 1823, vol. vi. p. 619. 621, two cases of the cure of the bite of the Rattle-Snake, by Alcohol, Capsicum, and Ammonia, are stated by William Mayrant, Esq. In one of these cases, the patient, a male adult negro slave, was found, in about ten minutes after the bite, "*extended, motionless, and speechless, his jaws locked, with a very feeble, fluttering, and scarcely perceptible pulse.*" This patient is said to have retained in the stomach, at least two quarts of Spirit made strong with Capsicum, in the course of the night. Three quarts were in fact taken, but it is supposed that one might have been lost. The relief from urgent symptoms, and the improvement of the patient, was in precise proportion to the quantity of these stimulants retained. The day following, it was necessary to continue the Spirit in moderate quantity, in conjunction with liquor of Ammonia, and nourishing food, after which he was considered as recovered, excepting merely of the wound. The other case was recovered by the use of a quart of Spirit and Capsicum, in ten or twelve hours. It is said that there is an account of a case, by Dr. Ramsay, in the National Intelligencer, two years previous, which was speedily cured by large quantities of Brandy and Opium. In tropical climates, it is well understood, that the most dangerous cases, such as would prove fatal in fifteen minutes, without medical aid, may be cured, by a free use of Spirit. Indeed instances have been known, in which a drunken man has been repeatedly bitten, with perfect impunity, by the most venomous Snakes of warm regions.

synochous type? Does it, by its operation upon the secernents and absorbents, improve the quality, and lessen the quantity of the pus, and at the same time promote healthy granulations? This certainly would be answering the usual indications in such cases. Of all this, however, I know nothing personally; but I know of no good reason why it may not be the fact. In these cases, as well as in Dysentery, the merits of the medicine, with me at least, still remain to be tested by experience.

30th. HYDROPS-THORACIS, or *Dropsy of the chest.* In this disease, it is said that simple tincture of Sanguinaria, taken about four times a-day in a nauseating dose, and continued for several weeks, often lessens the frequency of the pulse, occasions a gradual absorption of the effused fluid, assists in evacuating it by diuresis, and leaves the system in such a state as to prevent a return of the complaint.

31st. PARAMENIA-OBSTRUCTIONIS V. IDIOPATHICA, or *idiopathic obstruction of the catamenia.**

In this disease, Sanguinaria is considered by some practitioners to be one of the most valuable remedies which we possess, but I must however state that I have never used it myself in such cases, though I have often received the most satisfactory testimony of its power. I am informed, from unquestionable authority, of a judicious medical practitioner, who has long relied exclusively upon a saturated tincture of Sanguinaria and the Acorus-Calamus, in the treatment of this disease. He uses this preparation

* This may be distinguished from the other varieties of *Paramenia-obstructionis*, by the circumstances that at the regular catamenial periods, instead of the customary evacuation, there is pain in the back, hips, legs, and head, flushed face, and sometimes frequent micturition. The pulse is full, and often bounding, but not strong and hard on the one hand, nor weak on the other, so that the patient is neither in a positively entonic, nor a positively atonic state, but, at most, can be said only to be plethoric, the plethora however being a mere effect of the suppression. In the intervals of the catamenial periods, the general health is good. These are the cases which are erroneously considered as entonic, the cases in which bleeding and active purging are so often resorted to for relief. Unquestionably this course is occasionally completely successful without any aid, but much more frequently, it requires to be followed by other remedies. The fact that the pure tonic emmenagogues disagree, previous to the bleeding and purging, is considered conclusive in favour of the entonic character of the complaint. After this process, which reduces the system to a positively atonic state, they usually operate kindly, and give relief. The real truth is that such cases require neither reduction nor invigoration, neither bleeding nor purging, as reducing agents, nor excitants nor tonics, but only direct emmenagogues, or, perhaps, in more strict propriety, deobstruents. These are the cases in which *Helleborus-niger*, and other similar articles, are the most effectual remedies. Thus Woodville says, the black Hellebore "often proves a very powerful emmenagogue in plethoric habits, where Steel is ineffectual or improper."

freely, and, as is stated, always with speedy success. When used freely by females, in some other diseases, Sanguinaria sometimes produces hemorrhage from the uterus, and, on this account, considerable prejudice is well known to exist against it in some parts of the country. As mere symptomatic *Paramenia-obstructionis* is always to be removed, by the removal of the disease upon which it depends, or of which it is a mere symptom, so the remedies must be as various as the original diseases themselves. In some cases, without doubt, where the original disease is of such a nature as to be susceptible of benefit from Sanguinaria, relief of this symptom may be obtained by it; but on this, it is unnecessary to expatiate in this place.

32d. In many ANOMALOUS COMPLAINTS OF THE BREAST, such as *weakness*, and *obstinate pains*, whether from sedentary mechanical employments, or from strains, blows, or other injuries, Sanguinaria is often a useful remedy.

From the preceding details, it will be perceived that the remedies which are *commonly* employed, where I contend that Sanguinaria greatly deserves the preference, are Antimony, Squill, Senega, and Cephælis-Ipecacuanha as emetics, and expectorants; Prot-Oxyd, and Proto-Chlorid of Mercury as deobstruents; depletion, purging, and Senega as emmenagogues; and Digitalis as a narcotic.

The employment of Sanguinaria in Croup, Pneumonitis, Phthisis, Rheumatism, &c. has been vehemently objected to, on the score of the supposed stimulating qualities of the medicine, and the supposed inflammatory nature of these complaints; as if both stimulation and inflammation were each a perfect unity. Such notions are obviously founded upon very contracted pathological views. Nothing can be more fallacious than this sort of abstract reasoning; and nothing has more retarded the progress of medical science, or led its cultivators so wide from the truth. The terms stimulant and inflammation are used too vaguely to justify any very certain general conclusions from the abstract nature of either. Paristhmitis-maligna of Good is an inflammation, and Capsicum is a stimulant, and yet this article is one of its best remedies. Blenorrhœa Luodes of Good is an inflammation, and Copaiva, Cubebs, and Lytta are stimulants, and yet these three articles are, by far, its best remedies. Gout is an inflammation, and yet, as is acknowledged, some of its best remedies are Colchicum, Veratrum, Savin, &c. which are ordinarily *considered* as stimulants. Even Puerperal-fever, which is maintained, at the present day, to be the *quintessence* of inflammation, is admitted to have been very successfully treated by Oil of Pine, which no one will deny to be a stimulant. So

also a Scald, which, in its early stages, no one questions to be an inflammation, may be treated very successfully at least, with Alcohol, liquor of Ammonia, oil of Pine, oil of Origanum, &c. all of which are undeniably stimulants. But, were these diseases always *actively* inflammatory —— were they invariably truly entonic in their character, I would concede the point at once, that Sanguinaria could not be an appropriate remedy for them, though I should still contend that this article is not a stimulant in the same sense as Alcohol and the aromatics are stimulants; and consequently, I should maintain that it might nevertheless be proper, in cases, and under circumstances, where these articles might be injurious. But notwithstanding the doctrine of the authors of the commonly received systems of theory and practice, that Croup and acute Rheumatism are necessarily phlogistic, or actively inflammatory diseases, and that in all instances, yet I am certain that since the general prevalence of the present diathesis, they have frequently been as decidedly atonic in quality, from beginning to end, though not often as much so in degree, as Jail-fever.

As respects Croup especially, that disease, without doubt, consists essentially in a peculiar and perfectly specific inflammation, differing equally from the common suppurative or phlegmonous sort, and from the erythematic. The single fact that it occasions an effusion of coagulable lymph from a mucous membrane, instead of a muco-purulent fluid, were there no other evidence, would prove this assertion. As this inflammation, when it affects other parts, the lower intestines for example, seldom produces much constitutional disturbance, so, in the early stages of Croup, even when diseases in general are of a highly phlogistic character, there is seldom much fever, and certainly very little of that kind of reaction, which attends common active, or entonic inflammation. Although it is very rare, if ever, that this disease assumes a true phlogistic character, or even much semblance of it, yet, on the other hand, it is rarely typhoid, unless some of the lowest diseases of that description happen to be prevalent. Instead of much fever of any sort, the sanguiferous system, in by far the greatest proportion of cases, appears to be in that negative state, termed by Darwin *Paresis-inirritativa.* In a few instances this disease is attended with what is sometimes termed Synochus, and in fewer still, with a perfect Typhus-syncopalis, when that disease happens to be prevalent. It is a fact, however, that an exclusively depleting, evacuating, refrigerant, and in all respects a strict and severe antiphlogistic treatment, and especially a free use of antimonials, not unfrequently produces a great degree of morbid irritability, which is

inevitably accompanied with excessive irritation, even from the slightest causes. This is often mistaken for high phlogistic diathesis by the inexperienced, and more frequently by those of this character who are advanced in years, and who therefore may be often considered as past the capacity for improvement, than by the young practitioner, who is commonly modest, and solicitous for instruction. Another circumstance has probably served with many, to confirm the notion of the high phlogistic character of this disease, viz. its great severity and obstinacy, under the method of management just mentioned. That this treatment of diseases not really phlogistic, only tends to produce the extreme irritability, and consequent irritation above referred to, is satisfactorily shown by Marshall Hall, in his work on *Mimosis-inquieta*, and may be inferred with certainty, from Welsh's account of the Typhus of Edinburgh, which he treated upon the plan in question. But evidence on this point is not wanting from numerous sources, and it may be obtained from almost daily observation.

In confirmation of the general opinions which I have advanced from my own observation with respect to Croup, I shall only add that I have often heard the same observations from the most discriminating practitioners of antiphlogistic days; that Good, and others, state that the fever in this disease is always inconsiderable; and that Armstrong, whom no one will suspect of any prejudices against blood-letting, purging, and other antiphlogistic measures, declares, in opposition to the whole general tenour of his theories and doctrines, that, from experience, he places no reliance upon blood-letting in this disease; and he believes that those cases, in which it has been considered useful, must have been inflammation of a different character. These views are very strikingly confirmed by Dr. Bretonneau of Tours, in his late work upon *pellicular*, *coriaceous*, or *diphtheritic* inflammation of the fauces and trachea. He says of the constitutional affection that it is "*erratic fever not much developed*," which amounts to saying that there is scarcely any fever at all; and he adds, that in this disease, neither depletion by the lancet or leeches, nor vomiting, nor purging, nor blistering, will do any good. He says, "I am forced to declare, contrary to the received opinion, that bleeding in Croup has done harm, and accelerated rather than checked the spread of the coriaceous inflammation." "I did not abandon this measure till after reiterated proofs of its injurious effects." But, at all events, I can confidently declare that a case requiring a decisive reducing, and a strict antiphlogistic course, has never fallen under my observation; and I view it as a great mistake to suppose that such mea-

sures merely are ever capable of removing this disease in the best manner. On the contrary, I have no doubt that they usually subject the patient to the necessity of struggling against both exhaustion, and a violent factitious malady; and that they not unfrequently interfere with the salutary effects of other agents. In the section of the country where I have principally resided, Croup, till within a few years, was comparatively the most fatal of all the acute febrile diseases. Now it has lost most of its peculiar terrors, and may be as often cured as any one of the severer Phlogotica. When called seasonably, not more than one instance in ten or twelve, taking the decided cases on an average, as they occur, fails of recovery. In this estimate, I do not include those slight instances, which approach so near to a catarrhal affection, as to leave room for controversy, as to which disease they belong, nor that supposed spasmodic and counterfeit Croup, which Good calls Laryngysmus, and which differs very considerably, at least as respects obstinacy, nor that symptomatic disease of the larynx and trachea, which sometimes takes place in the course of some varieties of *Paristhmitis-Typhodes*, *Roseola*, *Rubeola Typhodes*, &c. and which is doubtless a specifically different sort of inflammation, and requires peculiar management.

Could those gentlemen, who are in the habit of always treating atonic Pneumonitis, Phthisis, and atonic acute Rheumatism, as well as all cases of Catarrh, and pulmonary hemorrhage, by free, and repeated depletion, by profuse evacuations, by starvation, and the most rigid antiphlogistic regimen, once fairly witness the vastly superior success of an entirely different method, I have not the least doubt, that much waste of life might be prevented. How often do we meet with cases, that under judicious management, might have recovered in a week, and without any shock or violence to the constitution, or consequent exposure to chronic complaints, which, according to the fashionable treatment of the present day, have been depleted till scarcely a drop of red blood remains in their vessels, and drenched with Antimony, and the refrigerant salts, till the vital powers of the stomach, and digestive organs generally, are well nigh exhausted, and till the whole system is in such a state of extreme irritability, as to be seriously disturbed by the smallest doses, of the lightest tonic, and even by that nutriment, which is absolutely necessary to support life. The morbid susceptibility, and the irritation, which results solely from this treatment, seems to be constantly mistaken for inflammation, and phlogistic diathesis, and thus leads to a repetition of the measures, which have already produced such a dangerous waste of all the natural ener-

gies of the system, as nearly to preclude any hope of recovery. The prevalence of this indiscriminate and injudicious treatment is unquestionably a principal cause of the present disproportionate degree of mortality from Consumptions, in many of our large Cities.

By some who admit the propriety of the use of Sanguinaria in the atonic Phlogotica, it is contended that depletion should always be premised. But bleeding is *never* absolutely necessary in any of these cases —— in many, it is positively injurious —— and in some, clearly fatal. Those cases that are of the synochous type, it is true, will always tolerate bleeding, and in such, not unfrequently, it will produce a temporary and transient relief, but always at the expense of increasing the ultimate severity, and of protracting the duration of the case. When deobstruents are not to be employed in this sort of Phlogotica, and the cases are but moderately atonic, one bleeding will sometimes usefully increase the susceptibility to the medicines which are most generally used in such diseases; but, in this type, the deobstruents themselves always accomplish all those changes, and produce all that mitigation of symptoms, for which both the depletion and the subsequent course are ordinarily considered to be indicated. If the disease is, in reality, truly entonic, Sanguinaria is not generally useful at all. To the above remarks, I know of but one or two exceptions at most, viz. acute, and sub-acute Rheumatism, which may be entonic at the outset, and therefore require depletion, and yet subsequently be greatly benefited by proper deobstruents, such even as Sanguinaria.

Although I have denied that Sanguinaria-Canadensis, Veratrum-viride, and Colchicum-autumnale, under that management which is proper for the atonic Phlogotica, do in fact produce stimulating effects in any degree similar to those of Alcohol and the aromatics, yet I must repeat, that I have the best reason to disbelieve their utility, and even safety, in the true entonic Phlogotica, and, at least, till after suitable reduction by depletion and evacuations, and not even then, in more than one or two diseases. In those cases of Pneumonitis, Rheumatism, and Gout, in which they have been considered substitutes for bleeding and purging, I am satisfied that irritation or atonic inflammation have been mistaken for phlogistic diathesis. But, for my own part, I hold, that "*no argument like matter of fact is;*" and I am prepared to maintain, from multiplied observations, and very considerable experience; from many trials of various methods, and from the observation of many, under the direction of other physicians, that Sanguinaria, Veratrum,

Colchicum, Senega, and the other acrid articles, but especially Sanguinaria, are very greatly preferable to antimonials, and refrigerants, not only in the forming stage, but through the whole subsequent course of the diseases, for which they are here recommended; and that, independent of any evacuating effects; and they are of eminent service when given as freely as the stomach will bear without nausea, in counteracting and moderating the general violence of these diseases, in shortening their duration, and in obviating their fatal tendency. In many cases in which I have recommended Sanguinaria, we have absolutely no substitute for it; and after once experiencing its efficacy, we shall find difficulty in dispensing with it afterwards. That its great value in many cases, depends principally on its strong operation upon the secernent and absorbent systems, while it produces no reducing and debilitating evacuations, does not admit of a doubt.

It only remains now, to remark upon the uses of Sanguinaria, when externally applied. The dry powder of the root is well known to be an efficient errhine, or sternutatory, capable of answering most of the indications for this class of remedies. A frequent, and long continued use of it in this way, has, in a few instances, occasioned the sloughing of *Polypus-elasticus*, but it is more especially useful, after the removal of the tumour by surgical means, to prevent the growth of a new one. The dry powder likewise is often useful as an application to indolent and vitiated ulcers, which it frequently excites to a proper secretion of pus, and to the production of granulations. When often repeated, and long continued, the application of the fresh juice of the recent root is sometimes a successful remedy for Verrucæ and Clavi. The infusion or decoction has been sometimes employed with benefit as a gargle, in moderate cases of Paristhmitis-Typhodes; in some instances, its application as a lotion has arrested, in its early stages, Erythema-venenosa, or that peculiar erythematic or erysipelatous eruption, which is caused by certain acrid, and vesicating plants, as Rhus pumila, radicans, Toxicodendron, and venenata; and it usually cures Scabies, and other cutaneous eruptions, which are not connected with any constitutional disease. The Acetum Sanguinariæ, as I am informed by Dr. Thacher of Plymouth, Massachusetts, when used as a lotion, has, in his hands, cured that degenerated cutaneous affection of the hands, which is so common a complaint, and which is ordinarily known by the popular name of *Salt-Rheum*, a disease that I take to be the Impetigo-herpetica of Good. This preparation is probably a more active application than the infu-

sion or decoction, and may therefore be capable of relieving some affections of the skin, in which those preparations fail.

From the best information which I have been able to obtain, it appears that the earliest regular medicinal use of Sanguinaria, in Connecticut at least, was in the practice of Dr. Jehiel Hoadly, who resided in the southwest parish of Middletown. This gentleman is said to have been in the habit of employing it as early as *about* the year 1775, as an emetic in Croup. Previous to his time, this disease is said, in general, to have been treated very unsuccessfully, by the physicians in that vicinity. From Dr. Hoadly, it appears, that Jared Potter, M. D. subsequently Vice-President of the Connecticut Medical Society, and one of the first physicians of his day, in that part of the country, first learned its use. As Dr. Potter was more engaged in consultation than almost any other practitioner of his time, in the state, this important information was soon more or less disseminated. Dr. Hoadly also used Sanguinaria, but in all probability empirically, in Jaundice, chronic Coughs, and some other diseases. Had there been any medical journal, at that time, in what now constitutes the United States, the properties of this article would probably have been investigated, and communicated to the world, thirty years ago.

From line 5 of page 5, from the period after *recognition*, the following should have been inserted, as a note, at the foot of the page, but was accidentally omitted in the press-copy of the manuscript.

I am aware that the terms *stimulant* and *excitant* are often applied to every article, agent or process that is capable of making a positive impression of any kind, upon the living system, or of changing its condition in any way, or of exciting a new action of any sort. In this wide sense, these terms include not only every article both of medicine and diet, but every deleterious and morbific agent. In this wide sense they include not only every invigorating, but every reducing, and every mere counteracting agent, and they apply equally to the effects of Alcohol and depletion, Opium and evacuations, aromatics and antimonials, Cinchona and the refrigerant neutral salts, simple bitters and vegetable acids. The terms *stimulant* and *excitant*, as I have elsewhere remarked, are employed in very nearly this sense by John Murray in his classification of the Materia-medica, when he divides all medicines, whose operation he does not consider to be either chymical or mechanical, into *general stimulants*, and *local stimulants*; and I think that with equal propriety, he might have denominated the remainder *chymical*

stimulants, and *mechanical stimulants*, since they also make an impression, change existing actions, and excite new ones. In this sense, half an ounce of Nitrate of Potassa stimulates, but it is a stimulus which directly and very greatly lessens strength of action, or, in other words, weakens —— a stimulus which directly and very greatly abates phlogistic or actively inflammatory diseases, and aggravates those which are purely of an atonic character. On the other hand, six grains of Sulphate of Quinine likewise stimulates, but it is a stimulus which very powerfully strengthens or invigorates, in all cases of genuine or pure debility or weakness, and which as powerfully aggravates all phlogistic or actively inflammatory diseases. In this wide sense of the term, calling an article a *stimulant* is simply saying that it produces an effect of some sort or other upon the living system, which is even less definite than saying it is a medicine, since that implies that the effect produced is capable of remedying disease. This is surely no better —— nay, perhaps it is worse than using words without meaning. It is not pretended but that in this, and even several other vague senses in which these terms have been used, Mercury may be called a *stimulant* or *excitant*, but in the sense to which I have limited the terms, the only sense in which remedies can be called *stimulants*, in contradistinction from the other classes, Mercury certainly is not a *stimulant*.

But perhaps my ideas may be explained more satisfactorily in another way. Capsicum, Lytta, Zingiber and Ammonia, each produce a specific impression or irritation upon the animal system, when taken in sufficient quantities into the stomach. This impression or irritation differs somewhat, as produced by each of these articles, but still, it is of the same general character, and may very properly be called a *stimulant* operation. Quinine, Gentianine, and Quassine likewise each produce a specific impression or irritation upon the animal system. The general character of the impression or irritation produced by these three articles is so nearly the same as to associate them together, but it differs too much from the impression or irritation of Capsicum, Lytta, &c. to be correctly associated with it. We therefore call the effect in question a *tonic* operation. Now although we distinguish a *mere stimulant*, from a *mere tonic* operation, yet they are both operations that may be indicated in the same disease, and at the same time. The specific impression or irritation upon the animal system, which is produced by Nitrate of Potassa, and that which is produced by Tartrate of Antimony, (distinct from its emetic, cathartic, and diaphoretic operations) agree so nearly in their general character, as obviously to require association under one denomination. This operation I shall call a *refrigerant*, or, (by another word, by which I intend

the same thing) an *antiphlogistic* operation. Now in those diseases in which this *antiphlogistic*, or *refrigerant* operation is indicated, both a *stimulant* and a *tonic* operation, as above described, are certainly contraindicated, and *vice versa*. Surely it must be preposterous to express all of these operations, and various others equally diverse, by the term *stimulant*. The specific impression or irritation produced upon the animal system by Mercury, and Colchicum, (distinct from their emetic, cathartic, diuretic, &c. operations) is what I intend by their *deobstruent* effect. This effect is certainly very different from what I have described above as a *refrigerant* effect, and it differs equally from what I have pointed out as a *stimulant* effect. A *deobstruent* effect may be indicated in conjunction with a *stimulant* effect, and it may be indicated in conjunction with a refrigerant effect; but, as I have said above, *true stimulant*, and *true refrigerant* effects can never be indicated at one and the same time. Why then confound all these distinct operations, under the general term *stimulant?* Such a want of discrimination, in the application of terms, must result from inaccurate notions, and must give rise to inaccurate, and injudicious practice. Words are much oftener things, than is commonly supposed.

ERRATA FOR THE ESSAY ON SANGUINARIA.

Page 2, line 7, dele comma after atonic. Page 5, line 5, lege operations instead of operatiions, and antisyphilitic instead of antisyphiltic; line 6, lege antipsoraic instead of antipsordic. Page 18, line 35, lege experimenters instead of experiments. Page 21, after line 20, dele the dash in the middle of the leaf. Page 25, line 30, before irritability lege *temporary*. Page 33, line 8, instead of Canad nsis, lege Canadensis; line 15, instead of Culientis, lege bulientis; line 20, make the same correction. Page 34, line 5, instead of mima lege minima. Page 35, line 9, instead of Phosphoneselementarius lege Phosphorus-elementarius; line 2, from bottom, instead of immediately lege immediate. Page 41, lines 2 and 3 of the note at the foot of the page, instead of Œdontia, read in three instances Odontia. Page 42, line 29, instead of Culientis lege bulientis. Page 43, line 13, instead of Chryso-splenium lege Chrysosplenium; line 14, instead of Autumnale lege autumnale. Page 48, line 3, of the note at the foot of the page, instead of had lege have. Page 250, line 37, instead of without lege with as. Page 253, line 23, instead of Cephælis lege Cephaëlis (this correction to be observed throughout). Page 263, line 20, instead of Chronic lege chronic. Page 280, line 6, instead of Cities lege cities.

ART. II. *Essay on Malignancy.* By THOMAS MINER, M. D. of Middletown (Conn.)

MALIGNANT diseases, both in a sporadic and an epidemic form, have occasionally appeared in every portion of the habitable globe. War only excepted, they are the greatest calamity that has ever desolated the world. They always make the same impression upon the public mind, and wherever they occur, carry with them consternation and dismay. As they necessarily affect the character for salubrity of those sections of country where they prevail, and essentially injure the common routine of business and regular commerce, when they first break out, their existence is usually denied, till the cases become too numerous for concealment; and after their existence is established by the extent and fatality of their ravages, dissensions almost universally prevail, the unruly passions are let loose, so that instead of uniting to stay the plague, the community is torn by factions, and cabals and intrigue prevail where there is the most need of charity and benevolence. The peculiarly sensitive state of the public mind in times of any extensive calamity, and especially during the prevalence of mortal sickness, is well known to those who are acquainted with the history of malignant epidemics. At such times, so great is the perversity of the human character, that the most active and benevolent are generally subjects of the greatest malevolence and abuse, and the hard-earned reputation of a long life, spent in the cause of virtue, science, and humanity, is no shield against the slander and persecution of the day. The biography of Sydenham, Boerhaave, Rush, and of almost every other physician who has practised in pestilential diseases, will sufficiently illustrate the truth and accuracy of these remarks.

It is easy to cut the gordian knot, for those who are too indolent or too ignorant to untie it. The human mind wishes for explanation, and does not rest satisfied without some reason, true or false, for every important and unusual occurrence. In case of the prevalence of a distressing malady, it is much easier to attribute the increased mortality to the want of common skill, or to the neglect or mismanagement of the physicians, than to investigate the subject thoroughly, and thus to ascertain, whether there is not some peculiar virulence or malignancy in the disease, which may place it beyond the reach of ordinary remedies. Mankind are much influenced by names, and though there are certain resemblances in diseases that are called by the same name, they often vary at different times and places very essentially in their character; and consequently as respects their treatment, the variations in degree and kind which are proper

in different circumstances, are almost infinite. To the superficial observer, who is ever inclined to draw general conclusions from a few insulated facts, it appears unaccountable, why diseases of the same name should not require the same treatment; and he is very apt to suppose, that cases which he has not seen, are attended with no other striking phenomena, than those which have occurred within the sphere of his own limited observation. If he has therefore happened to practise in a part of the country that has long been exempt from any fatal epidemic, he is likely to be extremely incredulous concerning its existence in other sections of the community. How that dysentery, fever, or pneumonia, cases of which he every year meets with and generally cures, should become intractable and extensively fatal, is beyond his comprehension. Nor will the clearest statements, nor the greatest accumulation of testimony, generally make a lasting impression, till in his turn he has had an opportunity of repeatedly witnessing the same maladies in their most virulent and malignant form.

Before entering upon the main subject of the essay, it may be proper to premise a few remarks upon the phenomena of fevers in general, since they are the cause of greater mortality than all the other classes of acute diseases.

Every *regular* continued fever, besides being commonly subject to daily exacerbations and remissions, has three distinctly marked stages, viz: The forming, or cold, or torpid stage —— the stage of reaction, or the hot and irritable stage —— and the stage of exhaustion or collapse. In a single paroxysm of an intermittent, in its cold, hot, and sweating stages, as they regularly follow each other, all the stages of continued fevers are to be seen in miniature. It is principally from the phenomena of the stage of reaction, that we ascertain the nature and character of continued fevers, including under the term fever, all acute febrile diseases.

The shock given to the system is sometimes so violent in the first stage, that the stage of reaction is never developed at all, and exhaustion immediately succeeds. In very mild cases, or under a happy and appropriate treatment, convalescence sometimes immediately ensues at the end of the second stage. The torpid or cold stage is occasionally so moderate, as not to be noticed or distinguished from predisposition, before reaction occurs. At times, in irregular cases, the different stages appear to be misplaced, or to be blended together. None of these variations, however, are sufficient to set aside the general rule, that every regular fever, that runs its *whole* course, has its stage of *torpor*, its stage of *reaction*, and its stage of *exhaustion*.

Happily for mankind, when the diseased action is moderate and regular, the restorative principle is so strong in the human constitution, that a great proportion of the cases of non-malignant fevers recover, under a very mild treatment, and in common complaints various and even opposite remedies will occasionally change or remove the same morbid action. In such cases, almost any new impression, in a greater or less degree, is a seasonable counteraction.

It is not meant by this, that all kinds of treatment are equally judicious, but only to express a fact that must have come to the observation of almost every physician. In other words, mild, moderate, or non-malignant cases, in a great majority of instances, ultimately recover, and admit of very considerable variation in practice.

Malignant diseases are not so tractable; they are always hazardous, and often fatal; and this not unfrequently, notwithstanding the most strenuous efforts, and the closest attention of the ablest practitioners. In the severest cases of this description, the system never spontaneously restores itself; or at least, no rational calculation can be made upon its efforts, without the interference of art. This assistance must be not only prompt but efficient, or the disease will soon be beyond the reach of all human control.

Before proceeding further, it may be proper to observe, that there are two great varieties of fever, which, though they occasionally run into each other, and are by most modern authors confounded together, are yet sufficiently distinct to require a considerable difference of treatment, though in their extremes they are equally dangerous and fatal; these are the *nervous* and the *putrid* fevers of the old authors. In the former, the stage of reaction is very slight, or the heat is only moderate, and but little, if at all, exceeding the standard of health; to this belong common nervous fever, (typhus mitior,) jail fever, and typhus syncopalis; to the latter, common putrid fever, (typhus gravior,) yellow fever, and the causus of the ancients. The attending fever of dysentery, pneumonia, small-pox, measles, and of most of the phlegmasiæ and exanthemata, may be of either of these descriptions. More generally speaking, the fevers of the northern and eastern sections of the United States appear to be of the nervous or cool type, and those of the middle and southern, of the putrid or hot type. Cases of either kind may be mild, and manageable, and more malignant; or they may be intractable, malignant, and fatal in the highest degree. It is probable that fevers of the nervous type, in a greater or less degree, are always of that class which are considered by many writers as atonic,

passive, or asthenic; but those of the putrid or hot type, in the stage of reaction, may be actively inflammatory, or entonic, or sthenic, on the one hand, or they may be extremely atonic or asthenic, on the other. This supposition accounts for the seeming discrepance concerning the treatment, during the stage of reaction, (for in reality there is very little question concerning the other stages,) of the putrid or hot variety of fevers. The truth seems to be, that they vary in diathesis, at different times and places, and not only admit but require a corresponding variation of practice.

The late learned Dr. Good, in a private letter to the author, very judiciously remarks, "I am well aware that in different situations, and under different circumstances, typhus, as well as every other species of fever, must vary considerably in its onset, *its subjugation of the living powers*, and consequently in its entire course; and I have hence endeavoured to show that, in the midst of general rules, still every case must be allowed to speak for itself, and to chalk out its own exceptions. And there is nothing that can so fully manifest the masterly judgment of a physician, as his readiness in making discriminations, and deciding from the train of symptoms as they arise and give a variety to the outline." This subjugation of the living powers, of which Dr. Good speaks, this degree of extinction of the vital principle, constitutes the great difficulty in treating pestilential or malignant diseases. Until this principle is in a measure restored, and there is an increase of vitality, all *ordinary* efforts for mitigating or removing the morbid action, are not only useless, but generally pernicious. They too often aggravate the symptoms which in common non-malignant cases they are calculated to remove, and hasten the complete extinction of the small share of vitality that still remains. As diseases of the same nosological character, and of the same name, often vary essentially in degree of severity and danger, it is a very important enquiry in every malady, whether it has any malignant tendency. Though each epidemic has its peculiar character, and each disease its apparently specific difference, there are certain prominent traits which are common to all malignant maladies. In this stage of the subject the following questions very naturally arise.

What is a malignant state of disease?

Has the term malignancy any definite meaning in medicine?

A great deficiency of muscular strength—an increase and even a degree of muscular strength, that is disproportioned to the other symptoms—excessive pain, anxiety, restlessness, or

spasms—faintness, or *gastric sinking*—morbid clearness of intellect, or great delirium, or coma—laborious or interrupted respiration—*calor mordax*—coldness, numbness, insusceptibility to the action of ordinary rubefacients and epispastics—suffusion of the capillaries—great contraction or dilatation of the pupils—vertigo, or double vision—extreme irritability or extreme torpor of the alimentary canal, and of the other passages that are lined with the mucous membrane—and also the same irritability or torpor of either or the whole of the organs of sense—excessive exhaustion after ordinary depletion and evacuations—passive hemorrhage—melænic, or colliquative discharges from the stomach and bowels—all the excretions very fetid, or much less so than in health—palpitation of the heart, and of the arteries in general—very frequent, very slow, very weak, or intermittent pulse—sordes and sphacelations—petechiæ, ecchymoses, vibices, phlyctenæ, pestilential carbuncles and buboes, and various other irregular eruptions.

The early appearance of either of these symptoms, when sufficiently severe, or a combination of two or three of them, makes it apparent to the most superficial observer, that any fever in which they prevail, whether it is of the nervous or putrid type, is highly dangerous and malignant.

When the stage of reaction is entirely wanting, or when it is so rapid and urgent as to threaten the immediate destruction or disorganization of some vital part, when any regular or essential symptom is absent, or when it is present in an improper stage, when coma, or furious delirium, or spasms and convulsions, or subsultus, or visible pulsations of the carotids, or hippocratic face, and other signs of urgency occur unusually early, or when any violent or accidental symptom suddenly appears, or when all the stages follow each other in such rapid succession, that a strong and violent critical effort supervenes within half the usual time from the access of the disease, the malignancy is equally apparent.

Thus far, all is evident, and there can be little room for mistake or dispute. The only question that can arise, concerning the nature of cases which are attended with such circumstances as the preceding, is in the latter part of the disease, in those instances in which these symptoms have been promptly and energetically controlled, and their violence has been suppressed or restrained, by a proper vigorous and commanding treatment. In this situation, the disease often assumes much of the form of common regular typhus, with the warm moist skin and frequent pulse of its last stage. A superficial observer, who now first views the case, without the greatest difficulty, cannot be made to

believe, that the preceding urgent symptoms have ever existed; and if there has not already been a complete crisis, he can hardly conceive the quantity of medicine, and the extreme care and attention, that are still required to keep the patient in his present comfortable state, nor of the danger, indeed almost the certainty of his sinking, if the medicines are abstracted, and the means discontinued before the disease is completely removed. In other words, this artificial, comfortable state, is generally mistaken by strangers for mildness in the disease, and symptoms that are controlled or removed, are with hesitation allowed to have existed.

But—there is another set of malignant cases, which, though they are very apparent to the accurate and experienced observer, it is extremely difficult, if not impossible, to describe in words, so that they can be readily recognised by the inexperienced or inattentive practitioner. These are the cases in which the symptoms cause so little distress to the patient, that neither he nor the bystanders are willing to allow that any danger exists, or that there is the least cause of alarm. Such varieties of disease, however, when they are feebly or injudiciously managed, are ever liable (on the fifth or seventh day, and sometimes as late as the fourteenth or twenty-first,) to sink suddenly, and by the time that the danger is first discovered, the patient is already at the gates of death. Perhaps three-fourths of the mortality which occurs during the prevalence of malignant epidemics, are among cases of this description, in which the unwary are confounded and taken by surprise. It is in vain for the author to attempt to describe this variety, since hitherto language has utterly failed to convey any adequate idea of it, to those who have not frequently witnessed cases of such sudden and unexpected sinking. Suffice it to say, that if the *morbidly natural* state of the skin, tongue, and pulse, which often attends this *insidious* variety, is excepted, nearly all the symptoms (excluding those which are incompatible with each other,) which belong to the *sudden* and violent cases, and which in them are such prominent signs of an almost total *want of vitality*, occasionally appear in a very moderate degree, in the insidious cases. Though neither of these symptoms taken singly, is sufficiently severe or urgent to appear in the least dangerous, yet there is something in the *tout ensemble*, which can leave no doubt on the mind of the discriminating and attentive observer, that all is not right—that there is something latent—that there is a hidden ambush—that extreme danger is lurking behind. More especially this is the fact, when *sudden* malignant cases are common, and a peculiar atonic or asthenic diathesis, or what Sydenham calls a particular epidemic constitution, is prevailing at the same time. Tissot seems to li-

mit his definition of the term *malignant* to this variety, which he compares to *a dog that bites without barking.*

The plague of the Levant, cholera of India, yellow fever, the remittent arising from the *malaria* of Italy, Minorca, Batavia, &c. nervous fever, putrid fever, jail fever, cynanche anginosa, dysentery, pneumonia typhodes, and the typhus syncopalis of New-England, are all very liable to be *malignant;* and yet individual cases, and even whole epidemics of them, may be non-malignant and very *mild.* In the former state, notwithstanding every exertion, they are always dangerous, generally obstinate, and often fatal; in the latter, though by injudicious treatment or neglect they are at any time liable to become unmanageable, yet by a suitable course of medication they commonly yield with ease. Each of these diseases is usually atonic or asthenic; there is *a deficiency of vital action,* arising probably from *a diminished secretion* of vital power. To be more explicit——that indescribable something which is called life, vital principle, sensorial power, excitability, vitality, spirit of animation, &c. (though all these terms are not precisely synonymous,) is less than in health. In entonic or sthenic diseases, the vital principle appears to act with more vigour, at least in the sanguiferous system, than in health; in the atonic or asthenic, it not only acts more feebly, but in reality is deficient in quantity. In mild or non-malignant cases, this deficiency is comparatively slight, the diseased action may usually be changed or mitigated by ordinary means, and sometimes may be removed by various and opposite modes of treatment; and when there is a failure of changing or removing the morbid action, the stage of exhaustion is often so moderate, that the common exciting and supporting agents will usually keep up a supply of vital power, till the disease runs its course, and terminates by a favourable crisis.

In *malignant* cases, the deficiency of vitality appears to be very different, not only in *degree,* but in *kind,* from that which belongs to *common* or *non-*malignant, atonic or asthenic diseases. There seems, from the very access, to exist a state analogous to that of apoplexy or palsy, or to that of the factitious diseases which are produced by excessive quantities of narcotics, essential oils, lead and other poisonous metals, or mephitic gases. There is an almost total extinction of the vital principle, the patient appears to be but half alive from the very onset. There is a derangement *sui generis* of the powers of life, which produces an extreme difficulty of changing the morbid condition by ordinary means. In a word, there exists in the system *an insusceptibility to the remedial action of ordinary medicines in ordinary doses and quantities.*

Malignancy is no *essential* part of the nosological character of any disease. It is therefore very little noticed in the text books and systematic works, and students are rarely informed of its nature by their professors and teachers. Indeed, the very state on which it depends, an *original* deficiency of vitality of a *peculiar* kind, is often entirely overlooked, or its very existence denied. It is confidently maintained by many, that every acute febrile disease *begins* with an increased vital action, and that all exhaustion is the consequence of a previous excessive action of the powers of life. In reply, it is only necessary to remark, that whoever teaches such a doctrine, can never have practised extensively in a malignant epidemic, especially of the nervous type, or he must have frequently seen cases in which the vital principle was suddenly paralyzed, and nearly extinct on the very first access of disease, without a single symptom of previous increased excitement, or any thing like reaction through the whole course of the disease.

If mankind in general were better acquainted with the two important divisions of acute diseases, the *malignant* and the *non-malignant*, most of the medical controversies which agitate the public mind, during the prevalence of severe epidemics, would be prevented. They chiefly arise from the popular mistake, that every disease of the *same name* requires the *same practice*. It is not rare, during an epidemic of dysentery, pneumonia, cynanche anginosa, nervous fever, putrid fever, or typhus-syncopalis, to find several patients in the same house, who are sick of the same disease; and yet one of them may be a case as malignant as the plague, while the others are perfectly mild and manageable under the lightest treatment.

No really malignant case was ever safely treated except upon an energetic, supporting and exciting plan, adapted to the urgency of the symptoms, the degree of vitality that exists, and to the known obstinacy of the disease. This practice has the highest antiquity in its favour, and the experience of all ages on its side. We know that it is as ancient as Solomon, and has the sanction of inspiration itself. (See Proverbs 31. 6.) It was the treatment of Hippocrates, the father of physic, (See Hippocrates, article Typhus,) and is declared by Van Swieten to be the universal practice.

To conclude. Malignancy is a state of the system in which there is a peculiar deficiency of vitality, attended with an insusceptibility to the curative action of ordinary remedies, in ordinary doses and quantities.

Middletown, Connecticut, 1827.

[The writer has occasionally stated some of the principal ideas of the preceding essay in letters to his correspondents, imperfect extracts from which, in two or three instances, have been printed. This is, however, the first time that the entire dissertation has ever been offered to the public.]

Case of Gangrænopsis, with Remarks by THOMAS WORTHINGTON, M. D. of Deer Creek, Hartford county, (Md.)

My niece, *Ellen Hopkins*, a blooming girl of 15, was attacked on the 20th ult. by a bilious remittent fever, which was treated by emetics, cathartics of calomel, with oil or salts, blisters, antimonials, &c. About the first of the present month, a profuse discharge of saliva taking place, accompanied by a swelling of the face, and particularly of the left cheek, I was impressed with a belief that the calomel had exerted its specific operation upon the general system, and in consequence flattered myself that an amelioration of every unpleasant symptom would be the speedy result: in this, however, I was greatly mistaken; the fever went on uninterruptedly in its progress, heat of the skin and thirst augmented, tumefaction of the cheek greatly increased, accompanied by a peculiar hardness, without any pain or appearance of active inflammation, and a peculiar indescribably fœtid exhalation from the mouth. The flow of saliva now suddenly ceased, whilst the fœtor of breath and febrile excitement rather increased. She was affected with delirium, and though the cheek was pallid, the eye of the same side of the face was red and inflamed. The pulse being too soft and compressible to admit of the lancet, cathartics of oil and salts were now chiefly depended on, with blisters to the neck and extremities, for moderating the fever: applications of camphorated oil were made to the œdematous cheek, and astringent gargles of alum in sage tea were directed to be frequently used. No amendment being observable on the 4th inst. I began to suspect that the case might be similar to those described by Dr. Jackson of Northumberland, and on referring to his essay, was at once confirmed in this opinion. The inner surface of the cheek being examined, was found to have sphacelated; to what extent, however, could not be accurately ascertained on account of her inability to open the mouth. A large blister was now applied over the cheek, and a decoction of the oak bark with alum used as a gargle. The

pulse becoming still softer, with other symptoms of increased debility, serpentaria and carb: ammon: were administered with a view of supporting the system, until a remission of fever should be brought about, sufficient for the administration of the bark. On the night of the 6th inst. a hæmorrhage occurred from the erosion of an artery upon the inner surface of the cheek, and on the morning of the 7th, I was much alarmed by observing that the mortification had extended internally to the corner of the mouth, and was beginning to show itself upon the outside of the face. By the middle of the day, a dark line of gangrene had reached from the mouth three-fourths of an inch, in a direction towards the ear. A large poultice of the decoction of oak bark, thickened with meal, was this morning applied in place of the blister, and as the opposite cheek was assuming the same peculiar hardness, a poultice was applied to it also. The sulphate of quinine was now tried, but we were obliged to desist from its use, on account of its increasing the fever. On the 8th, the gangrenous erosion did not appear to have extended, the poultices were frequently reapplied, the surface of them sprinkled over with the best Peruvian bark. On this day she took 8 grains of quinine which she bore well. On the 9th, a distinct line of separation was discoverable between the sound and mortified parts; the hardness of parts surrounding the mortification evidently diminished; the quinine continued. During the exacerbations of fever which have regularly taken place from the commencement, she takes the snake-root and ammonia, and on its remission, the quinine, with small portions of the best wine frequently. On the 10th, there was an evident amendment; fever lessened—swelling of the eyes, face and lips considerably diminished—less delirium—suppuration goes on finely. 11th. Has slept well during the last night: portions of mortified flesh having sloughed away, were this morning renewed, exposing the teeth and gums to view, which were quite sound, and of a healthy appearance. The corner of the mouth completely destroyed, leaving the lips of that side of the mouth entirely separated from each other. Poultices continued as before. 12th. Takes quinine to-day—fever increased in the afternoon—11 o'clock P. M. Profuse hæmorrhage took place from the exposure of an eroded artery in consequence of sloughing—syncope occurred, and death supervened in two hours after.

Although at first impressed with a belief, as stated above, that the discharge of saliva about a fortnight from the attack, was in consequence of the exhibition of calomel, I have been induced to change my opinion since, for the following reasons, viz. 1st. the entire coincidence of symptoms with those cases related by

Dr. Jackson, in which this remedy had not been used at all, as in the instance of Eisley's daughter, or else very sparingly, as in the case of the daughter of J. Hepburn, Esq. 2ndly. The uninterrupted progress of the fever, altogether unlike those cases where the mercury is known to have produced its specific effects. 3dly. The small portions of calomel given, not exceeding 4 grains once a day for 3 or 4 days in succession, and which were uniformly followed by full doses of oil or salts, never failing to produce free evacuations of dark bilious matter; and, lastly, the peculiarity of the odour from the mouth, altogether unlike that from the use of mercury.

Before concluding I must not fail to make my acknowledgments to Dr. Jackson for the light he has thrown on the disease, which he so fully proved to be one altogether *sui generis*, and which, from its not having found its way into our regular systems of medicine, as well as on account of my own limited opportunities for reading, would have otherwise left me in the dark with respect to its real nature and origin.—The doctor has filled up several pages of his truly valuable essay in pointing out the dissimilarity between the disease of which he is treating, and the *canker*. The principal argument upon which he endeavours to support his position, is the difference in the locality of their origin; the one commencing invariably at the gums or roots of the teeth, the other, upon the inner surface of the lips or cheek. We should be aware, however, that the canker, an outline of which he has furnished us with, is an abridged description of it, as given us by *Dr. Coates*. When we refer to *Parr's* description, we shall find that the doctor's principal ground of distinction has not any *real* existence. *Cancrum oris*, called also *Libris ulcium*, (I suppose it ought to have been *Labris ulcium*, from *labrum*, the lip, and *ulcus*, a sore) also *gangræna oris*, and by Le Dran, *Cheilocace*, (which signifies *the lip evil*, from χειλος and κακον,) according to this distinguished author, is a deep, foul, irregular, fœtid ulcer, which appears upon *the inside of the lips* and *cheek*, and is attended with *a copious flow of offensive saliva*. The disease is seldom seen in adults, but it most commonly attacks children:—when the ulceration *begins* at the *inner* surface of the *lips*, it exhibits a deep, narrow, sulcated appearance, and quickly spreads along the inside of the cheek, which becomes *hard and tumefied externally*. He afterwards goes on to observe that the gums are *frequently* affected, the teeth *generally* loose, and matter *often* found in their sockets. From this description of *canker*, and the etymology of its synonyma, as well as from the use of these qualifying adverbs, *frequently*, *generally*, *often*, as applied to the state of the

gums and teeth, it will sufficiently appear, that the *true cancrum oris*, and the *gangrænopsis* of Dr. Jackson, cannot with propriety be considered as *distinct* upon the ground assumed by our author. We are by no means, however, disposed to contend for their identity, or to think that the doctor has failed in pointing out their true line of distinction, which appears to be this: that the gangrænopsis is the issue, not only of a *general* disease, as he supposes, but also, sometimes of a local affection, where its violence or force is concentrated at a point which appears to be peculiarly susceptible of gangrene: this, as is shown from the facts that have been successively brought into view, may be the case with respect either to the canker, the scurvy, the scarlatina, the dysentery, or bilious remittent and intermittent fever. Perhaps also the *thrush* might with propriety be placed in the number, as Parr informs us that he has known it frequently to terminate in mortification of the mouth, at a time when it prevailed as an epidemic and infectious disease.

Should it be asked why I omitted the applications of the actual cautery and undiluted muriatic acid, so strongly advised by the doctor, on the recommendation and high authority of the Baron Vanswieten, I would state in reply, that my own judgment could not well sanction the use of such means to a part so sensitive as the inner surface of the mouth. Here, too, I must dissent from the doctor in the sentiment expressed, that "such desperate cases" are the proper subjects for the display of heroic exploits. It was fortunate for me that I had not suffered myself to be swayed by the weight of so great a name: for, had these applications been made, and the hæmorrhage have afterwards occurred, as in all probability it would have done, I am at a loss to conceive in what way I should have avoided the reflection of having aided in the production of a catastrophe which proved to be the immediate cause of my patient's dissolution—or how I should have been spared the painful feeling to which an apprehension of this nature would naturally have given rise.

9*th mo.* (*September*) 28*th*, 1827.

On the action of carbonic acid gas upon the animal economy; a Memoir read before the Royal Academy of Sciences, June 26*th*, 1826. By P. C. Collard. Translated from the Archives Generales de Medecine, for the American Medical Recorder.

Dangerous and fatal accidents from exposure to mephitic gases are so frequent, that the subject cannot fail of being in-

teresting to the profession, and important to the public. The following translation of the memoir of M. Collard contains some new views well supported by facts and experiments, with which we presume most of our readers are not familiar. If it is known in this country, it is not generally realized, that it is very possible for an atmosphere to support combustion which is absolutely unfit for respiration. One of the tests of the purity of the air of cellars, wells, vaults, &c. which was formerly much relied on, is consequently taken away. The remarks of our author upon galvanism, inflating the lungs, tobacco, and ammonia, are apparently very pertinent, and worthy of the particular consideration of every member of our profession.—*Editors.*

CARBONIC ACID is generally regarded by chemists and physiologists as a mephitic gas that is *unfit for respiration.* I think, however, that it ought to be placed in the number of aeriform fluids that are *actively deleterious;* for, supposing it unfit for respiration merely, carbonic acid ought to produce, in the same circumstances, effects analogous to those of azote and hydrogen, since, like those gases, it would act only in virtue of an established, invariable, common, negative property—that of not being able to effect a change from venous to arterial blood in consequence of its privation of oxygen. Now, it is very certain, and I am about to demonstrate it, that carbonic acid possesses an action essentially different from that of azote and of hydrogen.

In the first place—Hydrogen and azote are not injurious to the animal economy when they are mixed with a sufficient quantity of respirable air to produce sanguification. Carbonic acid, on the contrary, causes fatal accidents, even death itself, notwithstanding the mixture of a considerable proportion of oxygen. A crowd of facts, some of which I shall cite, justify this assertion.

1st. If carbonic acid was only unfit for respiration, it is clear that mixing it with oxygen of the proportion of 79 to 21, it ought to play exactly the same part in respiration as atmospheric air. Now, I have uniformly seen perish, in less than two minutes and a half, the small though adult birds which I have plunged into a factitious air of 79 carbonic acid and 21 oxygen, under a bell sufficiently capacious.

2d. Further—if instead of these proportions we reverse them, mixing 79 parts of oxygen with 21 of carbonic acid, the birds immersed in this combination die at the end of two minutes to four minutes; however, after this experiment has been performed upon the birds a candle will still burn with a lively deflagration in the mephitic air. After these facts, the following cases are easily explained.

3d. A girl, holding in her hand a torch, goes into a cellar, in which for several days the juice of grapes had been fermenting. Scarcely had she passed the sill of the door, when she was seized with a slight sense of suffocation, and her eyes were dazzled; yet she proceeded a few steps. Vertigo, constriction of the temples, and great weakness, conjoined with a vague, instinctive sense of terror, were experienced; her knees bent, and the torch dropped. Of a sudden, rallying her strength, she started back, and fell out of the door of the cellar, exhausted and swooning. A mechanical movement had closed the door, so that she was no longer within the immediate influence of the carbonic acid gas. The freshness of the air and season, and the breeze to which she was now exposed, soon restored her to sense and vigour.

Seven or eight minutes afterwards, with proper precautions we went into the cellar; the torch which had been dropped was still burning. Does not this last circumstance evidently show, that there was a sufficient quantity of oxygen in the cellar, since it supported combustion? Let us remember, that if there was sufficient quantity of oxygen at the bottom of the cellar to keep the torch burning, there must still have been a greater share of it at the height of four or five feet, on account of the greater specific gravity of the carbonic acid gas.

4th. Mrs. T. occupied a large bedchamber at Rambouillet, separate from every other inhabited apartment. Timid to excess, she feared that thieves might get into the room by coming down the chimney; consequently, she closed the funnel by a valve which she let down every night after she had extinguished the fire. One evening her maid had the imprudence to close the valve without having previously extinguished the live coals which were upon the hearth. Mrs. T. had been scarcely ten minutes in bed before she felt involuntary drowsiness, with great pain in the head; soon tinnitus of the ears, vertigo, and an affright that she could not explain, seized her, and a general relaxation and sense of weight oppressed her limbs. To what could she attribute this alarming state? The recollection of the valve and the coals came to her mind. Anxious to free herself from the danger to which she was exposed, she sprung or rather in her struggle fell out of the bed. The shock from the fall of about three feet and a half reanimated her, and gave her strength to crawl to a window that was near, which she succeeded in opening. The impression of the fresh air soon restored tranquillity of mind and strength of body. After she had opened the unlucky valve, and had renewed the air of her apartment, she lay down with a severe pain of the head, and a general sense

of oppression, attended with a torpor which continued for several days.

Now, is it possible to suppose, that in the space of about ten minutes there could be evolved a sufficient quantity of carbonic acid gas to fill almost entirely a large room, and to expel its atmospheric air? If we assent for a moment to this ridiculous supposition, it remains to explain how the combustion of the coals could continue, or the night lamp over this very chimney remain burning.

5th. Unfortunately, nothing is more common in the country than asphyxia, produced by carbonic acid gas, during the fermentation of wine. I shall soon relate a very fatal example. However, almost all the tubs in well ventilated cellars are imperfectly covered with a light cloth, which opposes but a slight obstacle to the circulation of the air, which is increased by the elevation of temperature, the results of the vinous fermentation.

It is then certain, that carbonic acid gas, though mixed with a very favourable proportion of oxygen, nevertheless kills the animals that respire it, and there is an essential difference between its mode of action and that of azote or hydrogen.

Secondly.—What is asphyxia? The temporary or final suspension of life for want of respiration. It is then evident, that any gas which is not respirable will not cause death till after the instant in which respiration has become indispensable. Now this moment, in man, scarcely arrives till about five minutes after the suspension of the change of venous to arterial blood in the lungs; in other vertebral animals, with warm blood, it varies from three to four minutes; and from an hour and a quarter to nine hours in fish plunged in water deprived of its air, at the temperature of 10° to 20° of the centigrade thermometer.

It is infinitely more remote in the *batracian* reptiles, since these animals can live five days notwithstanding the absolute privation of respiration, as has been demonstrated by Edwards. This physiologist and M. Dumeril have seen the existence of salamanders prolonged eleven days after respiration was impossible; but as these animals had not been subjected to the experiments which I am about to relate, I ought not to take the duration of the frogs upon which I made my observations, as the term of life of *batracians* in a vacuum.

Mephitic gases, such as azote and hydrogen, which are not really deleterious, do not become fatal to the organization of mammiferous animals, till after six, eight, ten, or twelve minutes, and to that of fish and reptiles only after many days or

hours, according to the species of the animals, their age, the temperature of the medium with which they are surrounded, &c.

On the other hand, carbonic acid gas constantly produces death in vertebral animals with warm blood, within the space from sixty-six seconds to two minutes, or at farthest to two minutes and a half. Numerous and direct experiments upon many species of quadrupeds and birds, such as rabbits, *cabiais*, sparrows, linnets, &c. at different temperatures, have proved it to me very evidently. Hallé and Varin had already seen, the first a cabiai, the latter birds expire in this acid within the second minute. It is then in vain that Bichat and other modern authors pretend, that warm blooded animals can breathe with impunity carbonic acid gas as long as they can pure hydrogen, that is to say, during four or five minutes, and assign to the third minute the commencement of the change of arterial into venous blood, of the respiratory acceleration, &c. I am ignorant of what were the circumstances that led Bichat into this error; but I can confidently fix the last limit of life to be earlier than the instant which this physiologist regarded as the first period of the anguish of the asphyxia occasioned by carbonic acid.

I presumed, that fish and batracians would not live so long a time in carbonic acid as in water deprived of its air, in azote, or in hydrogen; but it was curious to acquire a direct proof of it by means of experiment. The results obtained surpassed my expectation.

1st. In water of the Seine not boiled, (containing consequently a certain quantity of oxygen,) holding in solution about three-fourths of its volume of carbonic acid gas, and at 12° of Reaumur, I plunged successively fish of different kinds, viz. *cyprin. alburnus*, *cypr. barbus*, *cypr. gobio*, and *perca fluviatilis;* I hindered them from breathing the air exterior to the water, by keeping them under by means of a wire net work. Many died before the sixth minute; no one lived longer than seventeen minutes thirty-three seconds.

2d. After having ejected the air from the lungs of six frogs by pressing under water the sides of the thorax, I shut them up successively under the wire net work, in water similar to that of the last experiment, and very nearly of the same temperature. They were all dead, some in fifteen minutes, and the latest in twenty-seven—a surprisingly rapid asphyxia, if we compare it with that produced by water which is deprived of its air, which, according to Edwards, supports life from eight to twelve hours. Still, we must not forget, that the slight concentration of liquid carbonic acid, and the mixture of this gas with a portion of oxygen, probably diminish its activity.

3d. The results of the asphyxia of frogs by carbonic acid gas are still more remarkable. Mr. Edwards allows from one to five hours as the duration of the life of frogs that suffer asphyxia in the air by strangulation. Deprived of the gases which their lungs contain, and plunged into carbonic acid gas, these batracians die in eight, ten, twelve, or fifteen minutes, the temperature being superior to eight and inferior to sixteen degrees of Reaumur.

It is then still true, that the asphyxic action of carbonic acid in gas or dissolved in water, is incomparably more speedy than that of azote or hydrogen, and than the effects of the strangulations of the batracians.

Thirdly.—The asphyxia, resulting from the cessation of the process of converting venous into arterial blood, manifests very different symptoms, from that arising from a gas positively deleterious; and a simply mephitic gas may be applied to a part or the whole of the skin without producing injury. Even if we suppose a kind of cutaneous respiration, it could not be so essential as to make the suspension of it for a moment fatal. Pure azote and hydrogen may for a long time envelope a limb of a man, or the whole body of smaller animals, such as cabiais, rabbits, sparrows, &c. without injury. Some researches made with a different view, and which I intend to publish, have already presented to me the irresistible proof of this fact, otherwise implicitly established by the experiments of Gattoni, and especially by Abernethy, upon the respiratory action of the skin.

If carbonic acid were not in itself deleterious, it would necessarily be as innocent as azote and hydrogen, when applied to the cutaneous surface; but experience denotes, that its effects are directly the opposite.

1st. Count Chaptal relates, that the limbs, after having been plunged in carbonic acid gas, are benumbed throughout. Induced by this fact, I was desirous of knowing what would be the effect of applying an atmosphere of this gas to the whole surface of the body. I consequently placed myself under a cloth which was covering a deep tub half filled with grapes in a state of fermentation. The nostrils were closed, and I breathed without difficulty by the mouth, inhaling the air through a long tube of about an inch in circumference, which reached five feet from the tub into a pure and well ventilated atmosphere. At the end of five minutes, I felt a light weight of the head, with indistinct vision; in eight minutes, some pain in the temples and under the orbits, tinnitus of the ears, and vertigo; in ten minutes, a continuance of the symptoms, general weakness and languor with a listless extension of the limbs, and slight acceleration of

the action of the heart; after twelve minutes, continuation and increase of the symptoms, and respiration became slower and deeper than it had been; an indefinite and vague terror instantly seized me, as if nature wished to warn me of the danger which was impending; finally, at the end of nineteen minutes, the weakness and torpor were so great, that the tube through which I was breathing fell from me, and I could with difficulty escape from the tub.

The daring and unfortunate Pilatre de Rosier formerly attempted a very similar experiment. He was let down by cords into an atmosphere of carbonic acid gas which was exhaling from the fermentation of beer. Soon a prickling sensation obliged him to shut his eyes; he experienced vertigo, and ringing of the ears; a choaking and a violent sense of suffocation; his countenance became blue, purple, &c. Between this experiment and mine, there exists an essential difference. Pilatre de Rosier breathed mephitic air, which produced the symptoms that we have related; while those which I experienced, were solely owing to the influence of carbonic acid upon the skin.

2dly. I shut up a sparrow in a bell filled with carbonic acid gas; his head alone projecting through a hole of moistened parchment, stretched very exactly over the vessel, and firmly closed round the neck of the animal, in order to prevent the escape of the gas, or the entrance of atmospheric air. The bird was sound and healthy, his body resting on one of the sides of the bell, and the neck which was surrounded by the parchment was not too much straitened, for the animal took food after the commencement of the experiment. Hence, no cause of death existed, except what should arise from the gas with which his body was surrounded. However, having his feet and wings tied, and lying upon a moist surface, he was not very conveniently situated; but I do not think those circumstances sufficient to extinguish life. Nevertheless, should any one repeat the experiment, I would advise to have the gas collected over mercury, to avoid the moisture of the bell; though as I before suggested, I do not think it a very important consideration. At the end of three quarters of an hour, respiration was accelerated; the eyes were fixed, the eye-lids becoming weakened were closed, and the bird was violently agitated; marks of extreme distress supervened within an hour and a quarter, and ended by death in an hour and three quarters. A second and third experiment produced the same results. In the second, the bird lived two hours; in the third, only an hour and a half.

These facts prove to a certainty, that the action of carbonic acid gas on the surface of the skin is very energetic and danger-

ous; a property which hydrogen and azote, as we have before demonstrated, do not possess; but which belongs to the deleterious gases, such as nitrous acid, arseniated hydrogen, hydrosulphuric acid, &c. as the experiments of Abernethy, and especially those of professor Chaussier prove. It has too confidently been asserted, that *the foresight of nature has extended the epidermis over the surface of the body, as a barrier of inorganic matter to prevent the absorption of deleterious agents.* Does not this idea, the agreeable hypothesis of an ingenious imagination, vanish before experiment, and give us a new proof, that we almost always err when we attempt to divine the laws of nature, instead of actually observing them?

Fourthly.—If we cast a rapid glance at the symptoms of asphyxia by azote and hydrogen, and by carbonic acid, we shall discover very decided differences, sufficient to characterize the nature of their respective action.

The former two of these gases are not primarily injurious, except that they impede or stop the process of sanguification, all the symptoms of the asphyxia which they produce arising principally from the embarrassment of this function. Indeed, oppression, pain, acceleration of respiration, threatening suffocation, progressive weakness of the body and senses, as if they were stupified by the circulation of venous blood in the arteries, are the principal and ordinary symptoms of this kind of asphyxia.

On the contrary, if we examine those which are the consequence of the action of carbonic acid, we find them attended with a profound lesion of the encephalon; vertigo, tinnitus of the ears, disturbed vision, extinction or perversion of the sensitive functions, partial or total abolition of touch and sensibility, convulsive singultus, headache, drowsiness, coma, concentrated delirium, and finally, the entire series of nervous symptoms, varying in kind and intensity, attack the animal exposed to asphyxia from carbonic acid gas. The other symptoms, such as laborious respiration, suffocation, &c. are *entirely secondary;* and almost always they are not fully developed before death has occurred from the former. The greater part of the observations, and especially the experiments upon animals with warm blood, and upon fish and frogs, which I have already related, leave no doubt upon this subject.

Fifthly.—A fifth and the last essential limit of separation arises between the action of hydrogen and azote, and that of carbonic acid. Where asphyxia produced by the first two gases has not endured very long, nor been excessive in degree, the result is not ordinarily the extinction of life. The symp-

toms of it readily and easily disappear, if the patient on being exposed to free air is still able to respire it spontaneously.

Thus, there are naturally three degrees of asphyxia, from defect of respirable air. 1st. Complete asphyxia, in which art is incapable of recalling life; 2ndly, apparently complete asphyxia, in which to appearance the patient is under the empire of death, and there is still behind a vital spark which may be rekindled; 3dly, incomplete or incipient asphyxia, in which there is a struggle between destruction and life, though most of the functions are performed feebly and imperfectly.

Asphyxia from carbonic acid gas scarcely admits of these three divisions; it is complete or incipient; the apparently complete is very rare. When the suspension of the vital functions has already been manifested, and the body presents the appearance of a corpse, death is most frequently irrevocable; and if we have sometimes seen individuals, in which animation appeared to be completely suspended, revive for an instant under the application of stimulants, they have soon relapsed into an irrecoverably mortal state.

There are too many proofs of the accuracy of these two propositions. Among many lamentable examples, the following is selected in support of my second assertion. A vigorous, healthy man, employed in making wine, while treading a tub of grapes a second time, was seized with asphyxia. His countenance, slightly distended and tumefied, is very red, eyes moist and sparkling; respiration appears to be entirely suspended, but a glass held before the nose is found to be a little bedewed; the action of the heart and pulse insensible. The patient is promptly undressed, carried into the open air, and laid horizontally, the head and shoulders a little elevated; immediately he has lotions of vinegar applied to the body, with irritating articles to the soles of the feet, palms of the hands, nostrils, and spine. Ammonia is presented to the nostrils, an enema of decoction of tobacco is administered, and his lungs are artificially inflated with air. By these means he seems to revive for a short time, and is considered as out of danger. Soon delirium seizes him, followed by coma. A new course of irritants is commenced, with bleeding in the foot, sixteen leeches to the temples, derivatives, &c. All these efforts are however in vain, and he dies under the secondary symptoms.

This immense difference between the danger of asphyxia from hydrogen and azote, and that from carbonic acid, is rendered still more evident by experiment. A small animal, such as a sparrow, plunged into azote or hydrogen, is withdrawn after three, four, or five minutes. He is motionless—however, if am-

monia is presented to him, and then he is exposed to the open air, he is soon restored to life; every symptom of asphyxia quickly disappears. But—let another of the same species, equal in size and vigour, be subjected one minute, fifty-six, or even forty-five seconds, to the respiratory influence of carbonic acid gas; twenty-eight times out of thirty he will perish, notwithstanding he is subjected to the odour of chlorine, of ammonia, and to atmospheric air. Nevertheless, he should not be, as yet, deprived of the power of motion, and should still breathe, though his limbs would be convulsed. But—if he should escape an almost certain death, he would remain weak, languishing, lying upon his side, and would exhibit debility and vital prostration. At the end of several hours, or even a day, he scarcely recovers his strength and vigour.

Sixthly.—Numerous differences, which are essential and unquestionable, exist between asphyxia from carbonic acid, and that which is produced by azote and hydrogen. I have even a difficulty in conceiving, how these two kinds of affection should ever have been so generally confounded, or so imperfectly distinguished by some authors, who have perceived the slight analogy without searching into its nature.

In truth, the error had its foundation in the experiments of some distinguished men, particularly Bichat and Nysten. I have already discussed those of Bichat, and I believe, have demonstrated their inaccuracy; I shall not again repeat my remarks upon this author. Nysten failed from the manner of the experiment which he attempted. Indeed, if according to his example we inject carbonic acid into the veins, or rather if we inject it rapidly and in a large quantity, we then cause death by distention of the cavities of the heart. Or, if we introduce it gradually into the vascular system, and with caution, it is at first dissolved in the blood, and circulates with it to the lungs. It there in a great part escapes from the circulation through the pores of this emunctory, so that we can with impunity cause enormous quantities of gas to enter the vessels and pass them; for, carbonic acid is not sensibly deleterious, except in a certain dose, and the blood contains but very little of it. We shall be convinced of the validity of this reasoning to prove the error of the researches and conclusions of Nysten, from the following experiment.

If we analyze, at a certain temperature, the air expired by a large rabbit, and received into a bladder, and determine the proportion of carbonic acid that is found in it; if then we inject carbonic acid into the jugular of this animal, and collect the air expired during the injection, after having reduced it to the tem-

perature of the other, we shall by caustic potash demonstrate a quantity of carbonic acid, so much the more considerable as the share that we have injected.

This mode of expelling foreign, gaseous or vaporous substances, which are introduced into the vessels, has already been proved by the experiments of Nysten himself, and by those of Messrs. Magendie and Ségalas concerning the venous injection of phosphorus, alcohol. and ammonia.

The same explication accounts for the innocence of beer, sparkling wines, and acidulous mineral waters, which in general are not taken in sufficient quantity, and do not contain carbonic acid enough, and its application is of too short duration, for it to cause fatal accidents. It is nevertheless certain, that in particular cases, these drinks cause phenomena that can only be attributed to the presence of carbonic acid. Thus, M. Desportes saw acidulous gaseous waters produce many symptoms of intoxication; and Messrs. Percy and Laurent observed, that the ingurgitation of beer produced such a relaxation of the cardia, that the whole length of the œsophagus could be filled with this liquor, which could be made to enter it from the stomach by pressing upon the abdomen. A person of my acquaintance, of a nervous, irritable temperament, experienced irritation of the stomach, vertigo, and suborbitar cephalgia, in consequence of the ingestion of acidulous water. I know a priest, the curate of a parish of Mirecourt (Vosges) who, habituated to a frugal regimen, and to water only for drink, experienced a real intoxication from the waters of Seltz and of Bussang. Finally, is it not certain that sparkling wines are more heady than ordinary wines?

Bichat and Nysten are hence deceived, in advancing that carbonic acid is not fatal, except on account of its being deprived of its free oxygen. We are obliged to acknowledge, that there is in this gas an active, deleterious property, inferior it is true to that of chlorine, arseniated and sulphuretted hydrogen, &c. but it is still real, rapid, and energetic.

Seventhly.—I shall not waste much time in treating of the nature of this action upon the animal economy. I will content myself with agreeing with Bergmann, in opposition to the greater part of modern authors, that it affects *principally* and *primarily* the nervous and cerebral organs. In reality, almost all the symptoms that it excites, announce a profound lesion of the encephalic functions; the development of them is rapid, the effects terrible, and instantaneous. A general collapse exists as long as life remains; and after death there is an extinction of all irritability. Chaptal and Fodéré appear to me to admit implicitly the opinion

of Bergmann; for, the facts cited in their works can admit of no other reasonable explanation.

Eighthly.—In the treatment of this kind of asphyxia, as well as in that produced by hydrosulphuric, or by any other gas which tends to strike with paralysis the diaphragm, and with torpor the brain and nerves, the most urgent indications are, to awaken the contractions of the diaphragm, and to stimulate the general nervous action.

Many means have been successively proposed to attain this double end. This multiplicity, of itself, proves their inutility, their insufficiency, or the want of skill in those who treat this kind of patients. It would be useless to speak here of the numerous medications which are ordinarily employed; I will only say a few words upon pulmonary insufflation, and upon the choice of substances to be injected into the rectum.

Does insufflation present any peculiar advantages when it is employed with prudence and ability? This question has long since been answered in the affirmative; the numerous successes of Wepfer, of Portal especially, the assent of Orfila, Adelon, Dupuytren, &c. have assigned to this mode of treatment a distinguished rank in the therapeutics of asphyxia; and finally, Leroy d'Etioles, in a memoir read to the Royal Academy of Sciences, has endeavoured to prove its dangers, and to induce a relinquishment of the practice.

The experiments of Leroy d'Etioles merit the attention of practitioners. Indeed, when we inflate with air the lungs fatigued with asphyxic spasms, gorged with blood, filled with carbonic acid gas, this organ is disposed to be ruptured from the effort of a very slight pressure. Now, the first effect of insufflation is compression of the gas already contained in the thorax, its condensation in the aerial cells, and consequently a forced distention of the organ of respiration. For, the contained air cannot leave the lungs by virtue of its elasticity, and its reaction against the compressing power of the aeriform column, crowded through the trachea, has necessarily for its point of support or fulcrum the bronchial ramifications. It consequently appears, that in some cases of asphyxia insufflation, without the greatest cautions, would prove mortal. We agree, however, that when performed with prudence, it is powerfully useful; the observations of almost a century prove it; and nothing can destroy the result of long experience; nothing can discredit well authenticated facts.

I am besides convinced by direct researches, that insufflation, when managed with art, causes a rupture of the pulmonary tissue of large dogs. This accident results only from a rapid and ex-

cessive *mechanical* insufflation, or its employment, 1st, upon animals of small size, as rabbits; 2ndly, in cases of a sanguineous engorgement of the lungs, after an asphyxia which is slow and attended with violent or spasmodic action, as in asphyxia from submersion or suspension.

We conclude then, that it would be in vain to attempt to reject pulmonary insufflation in asphyxia; but, that not to become fatal, it demands knowledge and ability on the part of the operator. Nevertheless, it would be preferable to pass over the diaphragm a direct and immediate galvanic current, by means of a slender needle, as has been successively proposed by Strong in Germany, and Pelletan and Leroy d'Etioles in France. We should thus unite the triple advantage of reviving the action of the diaphragm, of making the natural exit of the vitiated air precede the introduction of the exterior air, and finally, producing a general stimulation of the nerves of the brain, by the reaction of the local excitement. Unfortunately, this new therapeutic process is scarcely practicable in the country, where electrometers are almost entirely unknown, or at best are but very rare.

Notwithstanding the objections of Carminati, Portal, &c. practitioners persevere in introducing the fumes of tobacco into the rectum. It is however narcotic, too irritating, difficult to administer, and a doubtful if not injurious practice. Sensible of these inconveniences, and remarking that there existed some analogy of symptoms between asphyxia from carbonic acid gas, oxyde of azote, sulphuretted hydrogen, profound intoxication, or poisoning from hydrocyanic acid, I sought whether ammonia and the sub-ammoniacal carbonate, might not produce for the first of these affections, the favourable effect which is obtained from it in the others. Consequently, I produced asphyxia in some rabbits and *cabiais* by means of carbonic acid, oxyde of carbon, and the protoxyd of azote. I injected into the large intestine weak solutions of ammonia, of the subcarbonate and acetate of this alkali. By means of this introduction, and the exposure to fresh air, I reanimated several animals. Whence I infer, that although the ammoniacal salts are much less specific in these cases, than in intoxication and poisoning from hydrocyanic acid, they are still really useful, without partaking of the dangers of decoctions of tobacco, of acids such as vinegar, &c. and of many other irritating enemata.

Inferences.—In summing up the divers points of this memoir, I believe we may infer;

1st, That numerous and very decided differences distinguish the action of carbonic acid from that of azote and hydrogen upon the animal economy.

2ndly, That carbonic acid is *essentially deleterious.*

3dly, That the experiments that appear to establish the contrary are inexact and defective.

4thly, That carbonic acid acts *principally* and *primarily* upon the nerves and the brain.

5thly, That finally, insufflation, galvanism, and enemata of ammoniacal salts, prudently administered, may be of great efficacy in asphyxia from carbonic acid, oxyde of carbon, sulphuretted hydrogen, &c.

ART. V. *Description of an improved instrument for excising the Tonsils and Uvula.* By CALEB B. MATTHEWS, M. D. Philad.

THE situation of the tonsils and uvula, is such as to render them difficult of access when it is requisite to extirpate them; hence various methods have been proposed and instruments devised to effect this purpose conveniently.

With regard to the best method of extirpating the tonsils, surgeons differ, while some recommend the slow, but perhaps more safe process of destroying their vitality, by using the double canula; others advise their immediate excision, resorting to the actual cautery for the purpose of arresting the hemorrhage so liable to result from this mode of procedure. It is not at present our intention to decide upon their comparative merits. Our only design is, to present to the profession, an instrument which we hope will answer their expectations better than those which have preceded it, when their object is to truncate the tonsils or uvula.

It consists of a staff, having an oval ring at one end, large enough to receive the tonsil when most enlarged, and a handle bent at an obtuse angle with the staff at the other, for the convenience of holding the instrument during the operation. Attached to the side of this staff, is a plate so formed, that it will slide backward and forward on the staff, so as to diminish the size of the ring as delineated in Fig. 2nd. in order to adapt it to the uvula, or to lesser enlargements of the tonsil. A scalpel is attached to the staff by means of a sliding joint at one end, and an elbow at the other, similar to that used in the construction of parallel rules, in such a manner, that while the scalpel is thrust forward, this extremity, which forms the cutting part, and moves between

the staff and sliding plate, is also elevated so as to pass entirely over the space included in the oval ring, by means of which its edge is guarded. In passing it will assume the position represented in Fig. 2d.

The mode of operating with this instrument is as follows:—The scalpel being parallel with the staff, and the sliding plate drawn back as represented in Fig. 1st. the operator grasps the handle of the staff with either his right or left hand, according as it is the left or right tonsil he designs to excise. The oval ring is then placed over the tonsil, and the sliding plate is pushed forward so as to fix it there. Finally the scalpel is to be thrust forward with the other hand, by which the tonsil will be cut off close to the ring. The same mode must be pursued in extirpating the uvula. The advantages of this instrument are, that it can be adapted to any sized tonsil or to the uvula; that it has the proper cutting motion of a scalpel, which is upward or downward and forward; that it is light and portable, and owing to the slenderness of the staff the parts to be operated on may be seen more readily.

During every stage of the operation, the cutting blade is so guarded by the ring as to remove all danger of wounding any other parts than those to be operated on. The following description and plate will render the foregoing account more intelligible.

DESCRIPTION OF THE PLATE.

Figs. 1 and 2 represent the instrument nearly the proper size.

a, a, a. Is a staff having an oval ring at one end, and a handle bent at an obtuse angle at the other.

b. A scalpel the cutting part of which (c) is rather more than the longest diameter of the oval ring, and passes between the staff (a.) and sliding plate (d.).

d, d. A sliding plate designed to lessen the size of the ring, so as to adapt it to the uvula or to different sized tonsils.

e. An elbow attached at one end to the staff (a. a.) and at the other to the scalpel (b.), so as to admit of their separation at this extremity of the instrument, to such an extent as to permit the blade of the scalpel to pass entirely over the space included in the oval ring by which it is guarded.

f. The knob by means of which the sliding plate (d. d,) is slipped backward and forward to the extent of the slits (k. k.)

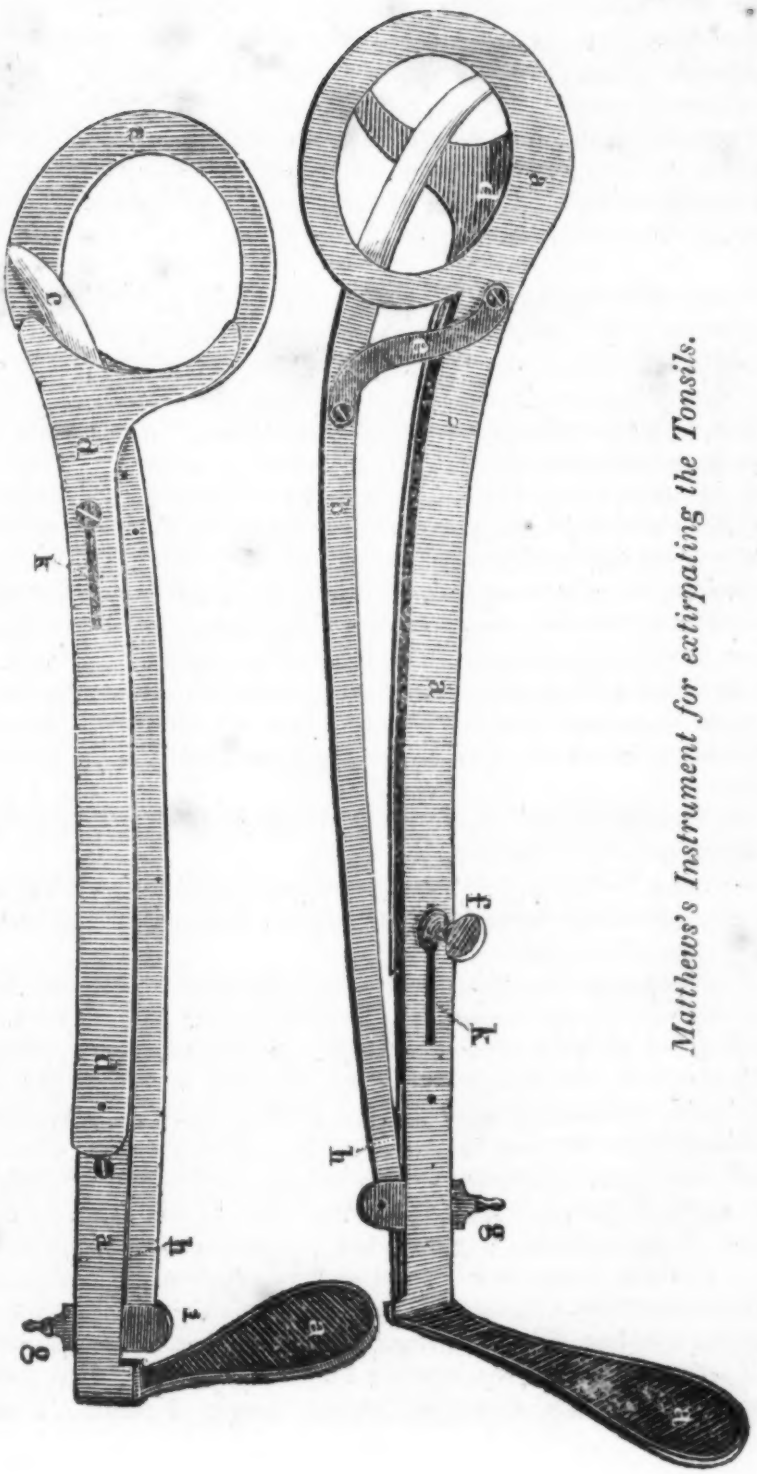
g. Another knob which slides in the slit (h) for the purpose of pushing forward the scalpel and producing the cutting motion as shown in fig. 2. When this knob is drawn back, as in fig. 1, the scalpel lays parallel to the staff on which it is placed.

i. The joint by means of which the scalpel is attached to the sliding knob (g.). as a centre of motion.

Fig. 1st gives a view of one side, and fig. 2 of the other.

Instruments of this construction may be obtained at Mr. J. Rorer's, No. 28. North Sixth Street, Philad.

Fig. 2.



Matthews's Instrument for extirpating the Tonsils.

ART. VI. *Observations on the medicinal Properties of Stillingia Sylvatica, and a relation of a case of Enlargement and Disease of the Bony Structure produced by syphilitic taint; where it proved highly efficacious.* By THOMAS YOUNG SIMONS, M. D. Port Physician, Charleston—formerly President of the Royal Physical Society, Edinburgh; of the Charleston Medical Society of Emulation, and Vice President of the Medical Society of South Carolina.

IT is certainly desirable that the medicinal virtues of all our indigenous plants should be known, especially those the active properties of which are likely to prove useful; with this view I give the following account of the *Stillingia Sylvatica*—or, as it is here vulgarly called, the "Queen's Delight." This plant has been long used among many of the country people, in cases of long continued syphilis, and an ignorant man of the name of Forster, since dead, gained great reputation in the cure of desperate cases of that disorder, the remedy for which proved to be the Stillingia. Between four and five years ago I was first persuaded to commence and make fair experiments with the plant; other medical gentlemen here have likewise used it, and its various forms of powder, root, and tincture are now to be found in most druggists' shops, although I am not aware that any account of its medicinal virtues has been presented to the medical public.

Dr. Stephen Elliott, L. L. D. in his Botany of South Carolina and Georgia. thus describes it.

Stillingia Silvatica.—Herbaceous; leaves sessile, oblong-lanceolate, tapering at base, serrulate; sterile florets, scarcely longer than the bracteal scale.

Root large, woody, perennial. *Stem* herbaceous, two to three feet high, somewhat angled by the base of the leaves, with the whole plant glabrous, and lactescent. *Leaves* alternate, irregularly serrulate, somewhat coriaceous, shining on the upper surface, paler underneath. *Stipules?* several small subulate glans on the axles of the leaves and flowers. *Flowers* in a terminal spike, the upper crowded as in an ament, sterile, with interposing cupulate glands. Fertile florets, few at the base; sterile florets. *Calyx* a scale, ovate, obtuse, mucronate, many-flowered (7). *Corolla* 1-petalled, funnel shaped, rugose yellowish, the border somewhat bilabiate, undulate, filaments 2, thick, longer than the corolla. Fertile florets. *Calyx* obtuse. *Corolla* superior, 1-petalled, with the margin fimbriate. *Style* erect, 3-cleft (perhaps 3-united); *Capsules* rather rough, 3-celled, 1 seed

in each cell. Grows in dry sandy soils. Flowers May and June.

The part of this plant which is used in medicine is the root. It was first used as follows: a piece the size of a wafer was cut off and chewed, and the juice swallowed; this was taken occasionally during the day, stopping, however, when sickness of stomach was produced. It is, however, very acrid and styptic, and creates, when thus taken, a husky unpleasant sensation in the throat. It is now used in decoction, tincture, and powder, prepared as follows. I give now my method of using it:

Decoction.—To about 4 drachms of the sylvatica cut up into small pieces, two-thirds of a pint of water is poured, it is put on a slow fire, the vessel covered, and allowed to simmer down to half a pint. The slower the boiling the stronger and more efficacious the decoction. At first half a wine-glass-full is given every three hours, increasing or lessening according as the stomach can bear it. In some cases it is given morning, mid-day, and night; say a wine-glass-full, increasing as much as the stomach will conveniently bear until the half pint is taken during the day. This plan, although troublesome, wherever the root can be obtained easily, is a good method of prescribing it.

Tincture.—To about four ounces of the root cut up, a quart of alcohol is poured; it is every now and then shaken; suffered to remain until the active principle is well extracted—when it is poured off and used. The dose is from a half to a tea-spoonful two or three times a-day—to be increased if necessary. The taste of the tincture is harsh, rather styptic and mucilaginous. It smells very much like laudanum. This is a very good method of exhibiting it.

Powder.—I have never used this myself, but 15 to 30 grains is about the average dose.

The Stillingia Sylvatica, given in the manner above described, I regard as at least one of the most powerful and valuable vegetable alteratives which we know of; and forms an admirable substitute for mercury, when that medicine would be inadmissible—such for instance as secondary syphylis more particularly. In all cases where an alterative is required, it will be found useful singly, or associated with other medicines.

In large doses it acts as a powerful emetic and purgative, and an efficient one too, although by no means equal to tartar.

Among many cases of its efficacy, I will now relate one which I regard as extraordinary, and has been so regarded by those who have seen it. On the 16th of January, 1827, I went to see the daughter of Mrs. ———, between eight and nine years old. The child was in the following condition: her head was

mis-shapen—having many bony tumours—and one on the os frontis was as large as a guinea fowl's egg—the nasal bone had come away—the palatine bone much inflamed, and the throat generally. She was much affected with strabysmus. The extremity of the os humeri and the olecranon process of the ulna, and the ulna throughout on each side were so much enlarged as to prevent locomotion at the elbow joints. The tibias and the knee joint were similarly conditioned, as well as the fibulas and the tarsal and metatarsal bones. The belly was much distended and hard; and I was apprehensive that there was a considerable enlargement of the mesenteric glands, and I still think so. In short, she was a miserable and deplorable object, perched double like a decrepid old woman on a small chair in which she was carried about.

The cause of this distressing state of things was syphilitic taint, and the free use of mercury in the treatment. I confess I used the stillingia sylvatica with no possible hope of success—and candidly told the mother so. She was, however, willing and desirous that the experiment should be tried. I first freely evacuated her bowels with cream of tartar and jalap—given thus:

Sup. tart. potass. ʒij.
Pulv. jalap. ʒij.—6 powders.

one to be taken night and morning—and this was continued until the bowels were completely cleared, as I thought, of any vitiated mucus or fæcal matter. I may here remark, that whenever I place any patient labouring under chronic disease on an alterative course I first freely and fully evacuate the alimentary canal, not with one purgation, but repeated for some time—and throughout the treatment. I frequently purge, especially when the alterative medicine seems to have lost its impression upon the system.* But, to return from this digression. Having freely evacuated the bowels, I then commenced with a half wine-glass-full of the decoction, prepared as already mentioned, every three hours, her stomach not being able to bear more—gradually increasing the dose until she was enabled to take a wine-glass-full—and whenever necessary, say perhaps once a fortnight, I would freely purge her. In six months' time the swellings on the head disappeared—the strabysmus considerably diminished—the bones of the arms and legs very much lessened, so as to admit free motion of the respective joints, and she could walk with the assistance

* It is very well known that a thick mucous slime is very apt to coat over and in a great measure occlude the mouths of the absorbents—thus preventing alteratives from being actively taken up in the system. The occasional active purgation removes this. I think many cases of alterative treatment in chronic disorders have failed from inattention to this point.

of a stick. Having thus unquestionably proved its great efficacy, I combined the sarsaparilla to see if the combination would prove more active; I saw, however, no difference, and therefore omitted it. She continued as formerly; and now, thirteen months since the commencement of treatment, the girl's countenance nor head exhibit no marks of deformity except the sinking down of the nose from the loss of the nasal bone. The intumescence of the belly has disappeared—the bones of the extremities have greatly diminished, and she can walk without any aid, but with a halt, which arises from a partial contraction of the tendons.

It must be remembered that this case was regarded by all who saw it, as well as myself, as beyond the means of medicine, and I made the experiment with not the most remote expectation of success. I have had, however, the great gratification of seeing a poor, miserable, helpless and deformed object, made somewhat serviceable to herself, and relieved, in a great degree, of her pitiable condition. I will send you some of the root and the powder, and hope fair trials will be made with it in the following cases particularly: chronic cutaneous disorders, chronic ulcers, and secondary syphilis.

ART. VII. *Remarks on the Medicinal Properties of Madar, and on the Effects of Bichromate of Potass on the Human Body.* By WILLIAM CUMIN, M. D. Surgeon to the Royal Asylum for Lunatics, and to the Lock-Hospital, Glasgow.

I. HAVING observed in the Edinburgh Medical and Surgical Journal, (xxvi. 401,) and afterwards in the Calcutta Transactions,* an account of a remedy named Madar, which has been long used by the natives of Hindostan in elephantiasis and other cutaneous diseases, I was struck with the similarity of its effects to those of sarsaparilla; and in a particular manner with the smallness of the dose in which it was found to prove most efficient. I determined to make trial of this new acquisition to our Materia Medica, and accordingly applied to Messrs. Duncan and Ogilvy, who furnished me with what quantity of the powder I required, with the most obliging readiness.

Madar powder is of a whitish colour; its odour is faint, and

* Paper by Mr. Playfair, vol. i. p. 77.

somewhat resembles that of opium, and its taste approaches to that of the common horsebean. I administered it to five patients in the Lock-Hospital. The form was that of powder, rubbed up with a few grains of gum arabic; and the dose varied from three to five grains twice or three times daily. In all of the cases it produced on most occasions a degree of nausea, and sometimes vomiting; and these symptoms occurred in some instances very soon after the powder was swallowed, but more generally not till after an interval of an hour or more.

One of the patients was a robust female, who was detained in the hospital by a trivial ulceration, which formed just as her primary sores had been cured. My object here was merely to ascertain the sensible effects of the drug on an individual in a state of good general health. Only slight nausea was produced, and that not uniformly after each dose. The medicine was soon discontinued.

The second case was one of obstinate primary sore, with general derangement of the health, severe headach, and pains throughout the body. The patient stated that she had been under mercurial treatment for some time previous to admission, but without benefit. In this instance the madar was given for seventeen days, at the close of the treatment, after the health had been improved; but the administration of the drug was so combined with various other remedies, that it is impossible to say what exact share it had in the accomplishment of the cure.

A third case was that of a patient of a strumous habit having an eruption of *psoriasis guttata*, slight ulcerations in the throat, and a diffuse tumour over the upper part of the tibia. The madar was given for twelve days without any marked benefit. The eruption yielded afterwards to mercurial frictions, carried to slight ptyalism; and the swelling of the leg, after being punctured, and discharging a quantity of tuberculous matter, healed soon after the discontinuance of the mercurial ointment.

In a fourth case the remedy in question was employed for four days only. The symptoms were complicated, but the amendment rapid. This, however, I do not ascribe to the madar in particular, although I have no doubt that it contributed to the result.

The fifth case was very severe and protracted, being an example of secondary syphilis in a highly formidable shape, complicated with pulmonary symptoms. In this instance the beneficial effects of the madar appear to be clearly shown, when the use of sarsaparilla served only to encourage perspiration, and thus debilitate the patient. As the two last cases possess a degree of interest, independent of the drug which has occasioned

these remarks, I shall now introduce an abridged detail of their history and progress.

C. F. a slender female, aged 22, admitted May 23d, 1827. Over the left eyebrow there is a diffuse swelling of the forehead, and on the skin covering it are several small slightly excavated ulcers, florid, with encrusted margins. They arose from small flattened pustules; and two of the same character are still to be seen higher up on the forehead. She has had a copious white discharge from the vagina for three weeks, which was at first accompanied by pain in the hypogastric region. She complains of pain in both legs, increased when in bed; and there is a slight diffuse swelling in the shins, immediately below the knees and above the ankles. On the inner side of the left wrist there is also some swelling, but without pain. Four years ago she had sores on the genitals, and subsequently sore throat, which were cured under mercury. Appetite defective; stomach occasionally acid; bowels and catamenia regular; tongue clean; pulse 106.

The usual purgative was given on admission, and next day the small ulcers were directed to be dressed with weak ointment of red precipitate, the legs to be rubbed with tincture of soap and opium. She was also ordered to use an injection of diluted *liquor aluminis compositus;* and to take a drachm of liquor potassæ three times daily, and five grains of madar morning and evening.

28th May.—The ulcerations in the forehead heal; pains and swelling of legs better; complains of inappetence and debility in the morning; madar powders at first caused nausea, but they do not now. In consequence of the state of the stomach I intermitted this medicine, but continued the other remedies, increasing the dose of liquor potassæ to ʒ*iss.* three times daily.

June 4th.—The ulcerations are all healed, one or two being still covered with pale smooth crusts; no discharge for ten days past; tibiæ now free from pain and swelling; appetite and strength improved; to take only ʒ*i.* of liquor potassæ for a dose, and drink daily the decoction of sarsaparilla.

8th.—All her complaints being removed, no swelling remaining in the forehead, and her health restored, she was dismissed cured, with directions to continue the sarsaparilla for a week longer.

In this case the variety of local symptoms present, and the deranged state of the health, certainly led me to fear that the cure would prove tedious, and had mercury been employed this in all probability would have been the result; but by adopting a less energetic mode of treatment, and correcting the acidity of

the stomach, the patient was dismissed cured in the short space of sixteen days.

M. M. æt. 18, a slender emaciated female, was admitted January 16th, 1827, with extensive superficial ulceration of the uvula, velum and posterior fauces, cough, copious expectoration of bloody mucus, and severe pain at the upper part of the sternum; bowels and catamenia regular; tongue slightly furred; pulse 112. Affection of throat of a month's duration; pectoral symptoms of fourteen days. No sores or discharge for eighteen months past. By the use of a variety of antiphlogistic remedies, and a blister to the throat, the affection of the chest was greatly relieved, with abatement of pyrexia, and the throat had become less inflamed and cleaner; but the ulceration was not checked, and there was much debility.

January 21st.—The throat was directed to be exposed to the fumes of calomel.

24th.—The tickling cough and difficulty of swallowing having greatly increased, mercurial frictions were commenced; and enemata of beef-tea were ordered daily to support the strength, as little or no food could now be swallowed. A great amendment resulted from full mercurial action, which was soon established; but it was found necessary, from its increasing violence, to stop the calomel fumigations on the 30th, and two days thereafter the frictions also.

February 6th.—The ptyalism was still considerable, but the throat greatly improved. She now complained of severe pains of the upper extremities and shoulders, in consequence of which sarsaparilla was ordered with opium and hyoscyamus at bedtime.

21st.—The pains were somewhat relieved, but the throat was stationary, with return of the difficulty of swallowing, and tenderness of the right *cornu* of the os hyoides. This last symptom did not yield for some time, until a small caustic issue was formed over the seat of pain.

23d.—No marked amendment of her complaints having taken place, she was now ordered to use, along with the sarsaparilla, small doses of corrosive sublimate.

March 3d.—Painful swelling of the left elbow-joint, and over the ridge of the right tibia near the knee. Blister to the elbow-joint. Leeches to the leg.

20th.—The throat was nearly well, and health improved, but there were considerable perspirations; mouth tender. Omit the corrosive sublimate. To take nitric-acid, with decoction of sarsaparilla.

May 14.—The throat had healed, but returns of ulceration had from time to time occurred.* Pain and swelling had affected the front of both legs, and the extremity of right ulna. Sarsaparilla, arsenic, and anodynes had been given, and leeches applied. The perspirations had continued often to an excessive degree. Last night the pain over the left tibia was so excruciating that I found it necessary to divide the tumefied part nearly to the bone.

17th.—For several mornings past she had spit up some blood, which induced me, as soon as I learned it, to intermit the arsenic, and order a blister for the breast, where she then complained of pain. Although the leg was certainly much easier, her situation was now far from promising, as she still perspired much, and the pulse was rapid. Having made trial of a great variety of medicines, and I may say almost despairing of accomplishing a cure, I now thought of exhibiting the madar, which I did in the dose of three grains twice daily, intermitting the sarsaparilla, and substituting Dover's powder† for laudanum at bed-time.

19th.—Little change, but she complained of nausea in the night. Perspirations have increased. Omit Dover's powder. Take at bed-time laudanum ℥ss. with Aromatic sulphuric acid twenty drops. Madar three grains thrice daily.

June 11th.—She had improved considerably, and was now able to walk into the airing ground. The nocturnal nausea and perspirations were still occasionally troublesome, particularly during the preceding night, when she was also much distressed with pain stretching along the front of the left leg from the knee to the toes. She still coughed up in the morning a little fluid, which resembled diluted port wine. Appetite pretty good. The incision over the tibia had healed, and there was little tumefaction either there or on the ulna. Omit laudanum. Take twenty-five drops aromatic sulphuric acid, with five drops tincture of assafœtida nightly at bed-time. Madar five grains thrice daily. A Belladonna plaster for the knee.

Soon after this a temporary disorder of the stomach caused the madar to be intermitted for a day.

18th.—The tinge of blood in the morning sputum had gradually diminished, and was not observed to-day. There was no complaint of pain in any situation, but the extremity of the ulna was slightly tender when firmly pressed. Her flesh and strength being greatly restored she was dismissed cured.

* A great variety of gargles and other applications had been used for the throat, which it would be tedious to enumerate.

† The Dover's powder had been sometimes found in cases of profuse perspiration to check that secretion.

This case illustrates in a striking manner the value of mercury in arresting the most formidable symptoms of lues venerea, and that too when the disease is complicated with alarming affection of the chest; but in its progress it shows also how groundless is the belief that mercury alone is sufficient for the cure of syphilis. The madar appears in this instance to have had a very salutary effect; to it I confess I ascribe the accomplishment of the cure.

I lately recommended a trial of this drug in a case of secondary phagedænic disease, where there were ulcerations of the throat and nostrils, scabby eruptions, and superficial ulcers. The dose was three grains three times daily. For the first two days the madar caused no unpleasant effect; but it afterwards began to produce nausea and occasionally vomiting, and at length every dose acted like an emetic. After ten days trial of the remedy, the ulceration of the throat having increased alarmingly, it was found necessary to abandon this medicine, and have recourse to a free use of mercury.

Of these five cases in which the madar was exhibited as a remedy, in two it produced no benefit, in two it seemed to contribute to a successful result, and in one I am inclined to ascribe to it the completion of the cure. Being in its nature an alterative, though one of a highly concentrated character, many trials must be made, and a long period must elapse before its virtues can be satisfactorily ascertained. Even sarsaparilla has been conceived by some intelligent men to act merely as so much tepid water; yet it is now admitted almost universally that no unprejudiced person can watch its effects without being fully convinced of its real curative efficacy. Let us therefore not throw aside the madar with neglect, but be encouraged to make trial of this drug, which is productive of no deleterious effects, and promises to prove a valuable acquisition in many unmanageable forms of disease.

II. Another remedy of which I have lately made use is the Bichromate of Potass, which was some years ago introduced into the arts as furnishing a beautiful and permanent yellow dye. My attention was first directed to the action of this substance on the human body, by seeing its injurious effects on the hands and arms of some men employed at the Barrowfield works in this neighbourhood. About five years ago I was consulted by two dyers, whose wrists and arms were affected with deep ulcers, caused by immersing them in a solution of this salt. I have since been applied to by a person employed in a manufactory of bichromate of potass, having sloughs on the fingers and *glans penis*, from the application of the salt in substance;

but in this instance there appeared to have been a wound or abrasion of the cuticle before the salt caused sloughing. In another instance of a dyer, the solution of bichromate had caused *psoriasis diffusa* of the hands, which, after some time, degenerated into *impetigo*, although during the interval he had been little exposed to the action of the bichromate solution.

The first effect of the habitual application of the solution of bichromate to the skin is to produce an eruption of papulæ. These, after a little time, become pustular, and at length, provided the exposure be continued, deep sloughs form under the pustules. The sloughs are of a peculiarly penetrating character; an instance has even occurred in which a complete perforation through the muscular substance of the hand has in this way been produced. Great differences exist among the individuals subjected to the action of the solution; some suffering very slightly, others severely, so much so, indeed, that swelling of the face and inflammation of the eyes have, I am assured, been produced in addition to the symptoms above described. To avoid the injurious consequences of immersing the hands and arms in the solution of bichromate, an apparatus has been constructed, by which the cloth is passed through the liquid dye without requiring more than the tips of the fingers to be dipped into it. Even this slight exposure, and the handling of the moist cloth after it has been thrown off from the machine, cause the eruption to make its appearance in susceptible individuals; and it would no doubt proceed on through its several stages were they not relieved for a time from the duty. Other liquids used in dying and calico printing produce irritating and injurious effects; thus the solution of chloride of lime causes softening, and sometimes destruction of the nails with excoriation, but nothing resembling the effects of bichromate of potass, the action of which appears to be altogether peculiar.

Soon after I succeeded Dr. Brown in the charge of the Lock-Hospital, I began to prescribe a saturated solution of bichromate of potass, as an application to tubercular elevations, excrescences, and warts. In these cases the new growth has sometimes been removed by absorption without any slough; but where a slough has formed, it has always served to expedite the cure, and in no instance have I observed it to be followed by a deep or unmanageable ulceration. In a case of warts, more extensive and formidable than any I had before met with or seen delineated, which I treated last winter, the solution of bichromate was the only remedy which acted effectually without causing such intolerable pain as to preclude the continuance of its application.

The bichromate of potass, although decidedly poisonous, does

not appear to be very active in its operation. It inflames the stomach, both when introduced into that organ, and when injected in a considerable dose into the veins. Under these circumstances, it would require some degree of medical hardihood to venture on its employment as an internal remedy; but it is probable, that, if cautiously used, it may be found, like arsenic, to possess considerable tonic virtues.

Edinburg Medical and Surgical Journal for October 1827.

ART. VIII. *On the Duration of Fatal Cholera.* By Mr. EDMUND TATHAM, Surgeon, and Member of the Royal Medical Society of Edinburgh.

THE following case is one such as may occur now and then to medical men, and though in itself perhaps not of much value, yet, at the present time, when some discussion has taken place as to the probably fatal termination of a case of cholera in this country within twelve or twenty-four hours, it may not be altogether out of place. When doubt exists in any case, nothing is so likely to remove it as authenticated facts; and where a statement is given in unison with truth, provided it bear upon the point in question, nothing objectionable can arise out of it.

I was sent for about four o'clock on Friday morning, August 31st, last, to see Anthony Dixon, aged 49, a farmer, of rather spare habit, but who had always enjoyed good health previously. I found him suffering under most severe symptoms of cholera. His extremities were cold; the pulse quick and irregular, scarcely to be felt; countenance cadaverous, and bedewed with a cold perspiration; tongue somewhat furred and dry; the bowels in a most disturbed state, and their liquid contents flowing from him while lying.

On inquiring of his wife the particulars of the attack, I obtained the following information: That a little after one that morning, she was awakened by her husband getting out of bed to go to the night-table, which he reached with difficulty, and where he evacuated such a quantity of liquid matter as perfectly astonished her; that his strength failed him so much afterwards as to disable him for returning to bed without considerable assistance; that some time after this on her giving him a little rum and water, he vomited, and complained of pain in his bowels, and became so low and exhausted as to lead her to suppose him

dying. She showed me what had been dislodged from his stomach, and likewise what had been passed by stool. The former was to appearance a tolerably clear fluid tinged with bile, the latter a slightly brown liquid, mixed with excrementitious matter of most nauseous smell. It was stated that the cramp in his legs had been so painful as to cause him to cry out, and make frequent efforts to rise.

Under such circumstances I thought no time was to be lost in combating a disease so quick in its progress, especially, as in the present case, where the vital powers seemed to have sustained a most serious shock. Accordingly, I requested hot fomentations to be immediately applied to the epigastrium, and bottles of warm water to be placed to the feet, which I further ordered to be well rubbed with warm hands. He took from me a mixture of laudanum, *liquor ammoniæ acetatæ*, and camphor mixture, together with warm brandy and water. In case the vomiting should return, I begged that one of a few pills, each containing two grains of extract of opium, and four grains of calomel, might be taken; and provided warmth and strength returned, the following powders were directed to be administered every two or three hours.

R. *Pulv. Hydrarg. cum creta; Pulv. Rhei ā ℈ij.; Pulv. Cinnam. c. ℈j.; Pulv. G. Trag. c. ʒiss. M. N. div. in pulv. viii.*

On leaving him, after remaining about an hour and a half, I ordered the attendants to continue most assiduously the restorative means, till nature seemed to have rallied, when thin gruel and tea might be given him for drink in case of thirst, which had not been troublesome as yet.

On my return at 10 A. M. to see him I found no amendment. The general powers of the system had sunk still lower, the extremities being something colder than before. His bowels were still very open; as cloths, which had been applied in consequence of inability to get up, were almost saturated with moisture. Little pain was felt now in any part, although there had been some both in the bowels and extremities since my visit. The pulse, which was felt with difficulty, was intermitting and tremulous. His breathing was hurried and disturbed, impressing the features with anxiety; and that peculiar contracted cast of countenance which so often accompanies intestinal irritation was distinctly visible. He was merely able to give an answer in the negative to an inquiry made as to pain that might be felt anywhere. Vomiting having taken place again, one of the pills was taken as well as a powder, which remained upon his stomach. The warm remedies, both internal and external, had been assiduously used, but without effect.

Every prospect of a speedy dissolution being evident, I had no idea of being of the least service; and with the exception of giving the poor man a little brandy and laudanum for form's sake, I left him, with desire that quietness might be observed as becoming the occasion. A messenger informed me that life became extinct a little before 1 P. M., making a space of about twelve hours from the apparent beginning of the attack.

That this sudden malady could not have existed long before the time of the patient's getting out of bed, when his wife was disturbed, must be inferred from her statement, that he went to rest in good health, having gone through the business of the farm with more than usual exertion during the day, and with appetite unimpaired partaken of food with the family, and talked in good spirits a short time before retiring, which was between nine and ten, about three hours before appearing so ill. Moreover, he himself signified that he was ill but shortly before awakening his wife.

The symptoms throughout were decidedly those of cholera, and of a sort which we do not often witness in this country,—more like that which so suddenly carries off numbers in the warmer climates. The infrequency of such cases with us has no doubt given rise to an opinion lately advanced by a professor in an elevated school of medicine, that this disease never proceeds to a fatal termination within two days; an opinion certainly which cannot but have greatly surprised those who have had occasion to notice much of this disorder, as existing here in some autumns, when patients have been reduced to the very lowest condition in the space of twelve or twenty-four hours, that no surprise or astonishment could reasonably have been entertained had death supervened immediately. By an effort of memory, too, instances must occur where medical men have had the pain of seeing individuals snatched from them by the hand of death in the space of twenty-four, thirty-six, or forty-eight hours from the commencement of the attack, in spite of every effort had recourse to; often unfortunately too late, from a desire, especially in the country, to dispense with advice.

To the doctrine that this disease will terminate favourably without the interference of art, few I think will subscribe who have suffered from the anxiety connected with attendance upon constitutions of a delicate structure, where something must be tried, and where evidently benefit has appeared to result from it. As respects the above case, but little opportunity was given for doing much, the extreme state of collapse which came on at once never leaving the patient. In such cases, where the whole frame has sustained as it were a death blow, no art or

management can do almost any thing; yet it is impossible not to feel desirous of attempting some means of relief, in hopes that success may attend the effort, ineffectual as it too often is. When the first symptoms consist of great depression and want of free circulation, our efforts perhaps cannot be better exerted than by attempting to equalize the latter, and by restoring to the extremities their wonted warmth and power. For this purpose the usual stimulating and rousing means both internally and externally applied seem most likely to afford successful results. Opium, accompanied with camphor, ammonia, and similar cordials, generally affords agreeable warmth and comfort to the stomach. Indeed, the first is often most felicitous in checking the train of morbid action, and recovering the exhausted frame from tremor and agitation. According to recent accounts, where considerable congestion oppresses the patient, which in some late forms of the complaint was very great in India, general blood-letting was practised with relief, and on a rational principle; but in this country it has not been much employed, except in a few constitutions. The good effect resulting from the use of leeches to the abdomen, where pain and tenderness exist, must have been apparent to all. If the practice emanating out of the gastro-enteritic doctrine of Broussais has on the continent been frequently misapplied, we cannot, with much truth, accuse ourselves of any such error here. How many cases of inflammation of one or other of the coats of the intestines are allowed to follow their course without that occasional use of local evacuants which, without impairing the general strength of the system, tend so powerfully to abate the force of the disorder.

Calomel, since its first recommendation by Corbyn, the East India physician, has been extensively used in cholera, especially in the warmer climates, and according to the evidence of several with marked benefit. Annesley, whose excellent treatise on this disease adds much to the knowledge previously extant upon it, speaks very favourably of calomel as improving the secretions, and dislodging the concrete mucus from the internal coat of the bowels. A combination of this medicine, with extract of hyoscyamus and opium in moderate doses, given every three or four hours, is frequently prescribed with advantage in this part of the kingdom, if the regular action of the bowels be kept up at the same time by mild aperients, as castor oil, which, when given in a suitable vehicle, sits more easily upon the stomach than might be supposed.

When nausea prevails, and thirst is urgent, saline draughts, with an excess of alkali, are highly grateful to the sufferer, and assist in allaying the irritation of the stomach and bowels.

unless the inflammation of their internal membrane be considerable, when but small benefit can be looked for till a copious stock of leeches be applied to the abdomen. By the way, it is curious to notice the quantity of small particles of concrete mucus, having the appearance of organized matter, that are occasionally evacuated after irritation has continued for any length of time. It generally alarms the attendants very much, and requires an explanation. I have seen a favourable change very often follow this discharge. Mustard poultices applied over the epigastrium often act on the principle of counter-irritation in a very satisfactory way; and I have used a bran poultice charged with some laudanum and brandy with a good effect in old persons, who have declared that the comfort they experienced from it was very grateful. The spasms that so frequently add to the patient's distress in cholera denote a good deal as to its nature. When the malady prevailed in this place in the year 1825, and was virulent, cramp was almost a constant symptom, not unfrequently showing itself before the other symptoms appeared to have set in. It may be relieved when in the extremities for a time by friction with warm spirit or *Eau de Cologne;* but it is liable to return and tease the sufferer, even when exhausted to that degree that he scarcely seems susceptible of pain.

Diluents, as barley-water, weak wine-whey, arrow-root, boiled in water, with or without milk, in moderate quantities, serve both to refesh the sick person and dilute the irritating contents of the *primæ viæ.* I have not had an opportunity of learning any thing as to the efficacy of copaiba or turpentine when administered internally in this affection. They are extolled for their power in relieving some inflammations of mucous membrane; but their nauseous flavour is a frequent objection to their use. The former of them is represented to be now prepared in such a way as to obviate this inconvenience.

What the cause of cholera may be is little known. Numerous conjectures have been thrown out regarding its origin and formation. Nearly all are in favour, however, of the influence of the atmosphere in its production, when assisted by certain conditions of the constitution and peculiar circumstances. Some imagine that an electrical state of the air affecting the nervous energy, and depressing the vital principle, gives rise to the distressing train of symptoms. Others affirm that terrestrial exhalations produced by solar influence act upon the body as miasmata do in the generation of fever. Others again blame certain *ingesta* introduced into the stomach whilst debilitated by irregularities and vicissitudes of temperature. The liver has not been

quietly passed over without partaking of a degree of odium in not rightly secreting the bile, according to the notions of some.

Dissection, in tracing the alteration of structure following a protraction of deranged vital movements, may throw a gleam of light upon this subject, but probably will, as is too commonly the case in *post mortem* examinations, disclose little as to the first principles of diseased action.

Those few remarks spring from a desire to call attention to a subject on which it would be highly desirable to obtain satisfactory and useful information. It does not follow that nothing should be discussed except where novelty can be introduced. When one calls to mind "nihil dictum quod non dictum prius," he may take comfort, though engaged merely in dwelling upon matters of frequent occurrence, and recapitulating things already known.

Kendal, September 8, 1827.

Edinburg Medical and Surgical Journal for January 1828.

ART. IX. *Copy of a Letter from* Dr. AUBAN, *a French Physician, settled at Constantinople for upwards of thirty years, to* Dr. DE CARRO, *formerly of Vienna, now of Prague.*

IF during so long a time I have not given you any sign of my being alive, it is because vaccination in this country no longer offered any thing interesting: but an event, which no one could have surmised, and which, in consequence, has astonished all those who have been made acquainted with it, ought to be transmitted to you.

Before announcing it to you, I should remind you that no Christian is ever permitted even to touch any prince of the Ottoman race, or still less to take blood from him in any way, or on any account. The great revolution that has been effected among the Mussulman people since the destruction of the Janissaries has changed every thing! The troops placed on the footing of other European soldiers,—the musket with its bayonet,—the military music, and nothing played except European airs,—a drum-major, with his great cane in his hand,—the sappers preceding the regiments,—the Grand Seignior himself in general's uniform, ordering certain manœuvres,—all these are the prodigies which one can with difficulty comprehend, and the whole brought about in a very short time indeed by one individual, but he, in truth, a great man!

Vaccination performed the 16th of May on three Sultans, or Sultanes, (a title given only to infants who are born on the imperial throne,) and two other young ladies of the harem, proves how much every thing has been changed amongst this people.

On the 14th of May, one of the physicians of the Sultan's seraglio begged of me to go to his apartments. He told me that he had received a message from the Echim Bachi, directing him to request of me to hold myself in readiness to go to vaccinate the children of the Sultan,—to have the vaccine matter always about me, and not to remove any distance from Pera. I remarked to him, that intrigues would cause some other person to be chosen to perform that operation. He replied to me, "There are no longer any intrigues that can cause the order of the Sultan himself to be altered, who has pointed out you on account of your age, your nation, and your name."

On the 16th, in the morning, an order for me to go to the palace with one of the physicians, who would act as interpreter, was transmitted to me. About nine o'clock we were shown into a chamber allotted to the Echim Bachi, who made no delay in coming. He caused the Kislar Aga (the chief of the black eunuchs) to be sent for, and immediately we three were introduced. At the first chamber where we stopped, we found a young Sultan, seven or eight months old, who was vaccinated forthwith. A few minutes afterwards his elder sister, about a year and a half old, appeared; she was also vaccinated; and then was brought in a still younger princess, who was submitted to the same operation: and all this took place without the smallest difficulty or ceremony. In two other apartments, two young ladies were also vaccinated.

The verification was adjourned to the 23d of the same month. The Echim Bachi, being sick, did not come; but we were introduced notwithstanding, and all the persons vaccinated were found going on well, with a most beautiful (*tres-belle,*) vaccine pock.

The 28th of the same month we returned to the palace, and the crusts which had formed left no fear about the maturation of the vesicles: all was finished, and complete. The Kislar Aga remitted me a very handsome present on the part of his highness, adding, "I have received this from the hand of the Grand Seignior, to be given into yours. He has sent it to you also to testisfy his satisfaction with you. That which you received the first day was sent to you on the part of the mother of the two young princes. We will now go home, to return no more to this place until some new prince be born."

You have here, as I think, a piece of news which ought to be transmitted to you. If you wish for farther details, let me know, and I shall consider it a duty to satisfy you. All this was done without the least mystery.

London Medical and Physical Journal for January 1828.

ART. X.—*Report of the Committee of the Philadelphia Medical Society appointed to collect facts in relation to the recent occurrence of Small Pox in this city.*

IT having been currently reported that several members of the medical profession had lost their confidence in vaccination to such a degree, as to render them willing to recur to the practice of inoculation; and considering the highly important interests likely to be affected by such a rumour, the undersigned were appointed, on the 16th of February, a committee to collect facts in relation to the recent occurrence of small pox in this city, and report to the society. Accordingly, on the 18th of February last, they issued a printed circular addressed to several physicians of Philadelphia, of which they submit the following copy:—

Sir,—Having been appointed a committee from the *Philadelphia Medical Society* to collect facts in relation to the recent occurrence of *Small Pox*, we have taken the liberty to request of you an answer to the following queries:

1. Have any cases of genuine small pox, subsequent to vaccination, come under your *personal* notice?
2. In such cases, what reasons have you for believing that vaccination was properly performed?
3. How many cases of deaths from modified small pox have come under your *personal* notice, and what were the circumstances attending such deaths?
4. How many cases of small pox subsequent to previous inoculation or natural small pox have come under your *personal* notice?
5. In the last set of cases have any and how many deaths occurred?
6. Have any facts come under your *personal* notice, tending in any degree to weaken your confidence in the efficacy of vaccination as a preservative against the *fatal effects* of small pox?

An immediate reply to the above queries will confer a great favour on

Yours respectfully,

EDWARD JENNER COXE,
D. FRANCIS CONDIE,
CH. D. MEIGS.

It will be seen, by reference to dates, that a very prompt and kind attention was paid to the above queries by a considerable number of medical practitioners, whose opinions are entitled to the respect and confidence of this community and the profession at large: among these, we might enumerate several gentlemen, who at an early period rendered the most signal services to the cause of vaccination, and who, in the progress of an enlarged experience and with a more mature judgment, have not lost any part of their confidence in its antivariolous efficacy.

Your committee will not refrain from an expression of thanks to the gentlemen who have so kindly, out of respect to the Medical Society, co-operated in this investigation; this prompti-

tude on their part has been a source of heartfelt satisfaction, not a little increased by the proofs contained in their letters of unanimity as to a great and beneficent doctrine, which, tending to avert one of the most deadly of human evils, deserves, like the doctrines of religion and liberty, the warm support and cordial acceptance of every enlightened citizen. This unanimity so consoling to the friends of vaccination could not have existed, had the doctrines of Jenner depended on unsubstantial hypotheses for their only basis and confirmation.

Although the history of vaccination is a history of its uniform and ascendant progress over all obstacles, whether of ignorance, prejudice or avarice, there have always been those, who, unwilling or unable to survey the whole subject, which ought to carry conviction to every judgment, have preferred to rely on their own limited experience of a few doubtful exceptions, and reject the boon of Jenner, rather than yield assent to a mass of evidence such as has scarcely ever been accumulated at any other department of human investigation. The doubts, hesitancy, and fears of such individuals ought not, and it is believed will not, prevent the extension and ultimate triumph of vaccination; when the variolous contagion, like the Jewish leprosy, shall cease to deform and destroy the race of man. The dogma of Willis, "Convenit enim homini omni, soli et semel, variolis aut morbilis affici," has already ceased to be true or accepted, however true it might have been anteriorly to the researches of Jenner.

Notwithanding that the anxiety of the public mind and of a very few physicians, in relation to the prevailing varioloid affections, may appear to derive some grounds from the number of persons who subsequent to vaccination have sustained an attack, your committee find it difficult to conceive of the necessity for stronger evidence in favour of the vaccine than is already in the hands of the people. What corroboration in fact is necessary or possible, where it is admitted, on the experience of half a century, that millions of lives have been preserved; that variola has from some countries been wholly exterminated, and in most parts of the globe disarmed of its dangers and deformity; that thousands of individuals, protected by its means, have been inoculated, and with impunity exposed to the concentrated contagion of small pox; in fine, since the growing lights of experience and philosophy teach both reason and the senses that the doctrine of Jenner is incontrovertibly true?

But the public mind, in all the concerns of health, derives its impress, in a great measure, from that of the medical profession, and it is true, that some individuals in this city have

freely expressed their doubts and apprehensions in relation to varioloid susceptibility. The ignorance of the public in relation to the laws of the vital actions is not a matter of astonishment or a subject of censure; and the alarm so naturally created by the occurrence of a severe varioloid eruption can only be allayed by the soothing and confident voice of the physician: but that the latter, also, should take the alarm, and concur in giving wings to rumour, is a circumstance most deeply to be regretted.

It is scarce necessary to state to the society, that this can only arise from imperfect or erroneous views of the power of certain causes to modify, and that permanently, the physical constitution of man.

The proposition to be solved in the premises is not, whether any cause can so change the *structure*, *irritability* and *sensibility* of the living tissues as to incapacitate them from suffering a second impression from a similar cause; for there is no physiologist who will deny the affirmative to be true. Mankind wish to know whether vaccina can so change the structure or properties of the tissues, as to render them unsusceptible of the impressions of variola. This is the question which agitates the public mind: *Shall we be safe from small pox if we are vaccinated?* The committee, willing to leave out of the question all the testimony of Europe, Asia, Africa, and the by-gone experience of the whole United States, are prepared to answer, from the documents now on the table, yes!—these documents prove it incontestibly. The Society will hear them in a subsequent part of this report.

Who doubts that measles, once suffered, incapacitates that individual, in all future time, from undergoing the same pathological state? And yet what practitioner, of a few year's standing, has not witnessed a second attack of rubeola? Is not the same thing true as regards parotitis, varicella, scarlatina, pertussis, &c.? Confessedly, these diseases have been known to attack a second, and even a third time, in numerous instances, ever since they first became the subjects of medical history, and this too, without invalidating the truth of, or preventing the public reliance on, the general rule, *that an attack is only sustained once by each individual.*

If this point be conceded, it may be used as an unanswerable argument against those who have so causelessly abandoned their faith in the guardian power of vaccination; for it shows that exceptions to the modifying power occur in all diseases.

The constitutions of men being not all alike, one individual may suffer severely with an undoubted rubeola or variola, without undergoing that perfect and exempting modification which, in another, is effected by a much slighter attack,—

hence, we not very unfrequently find that individuals, (as in the patients noticed by Dr. Otto and Dr. Condie) who are deeply pitted from the pustular suppurations of small pox, are attacked a second time, while those, on whom the arrows of pestilence left not a single trace, escape a second assault entirely, though frequently and openly exposed to the contagion. In this place, we may take occasion to say, that it is probable that greater malignity of the virus or miasma will be found to occasion a renewed attack in those partially protected constitutions which, under its ordinary ratio of intensity, would have remained wholly undisturbed. And such an hypothesis may be reasonably adduced in explanation of the more frequent occurrence of varioloid disease since the epidemic constitution first manifested itself in Scotland. Not only has it been proved that the human constitution is susceptible of such modification of textural or vital properties by the *contagious diseases*, it has been clearly shown in Germany, that even *medicinal plants* are capable of withdrawing us from the influence of these contagions: thus, belladonna, which in certain doses produces a scarlet efflorescence or inflammation of the skin, is habitually resorted to by many practitioners in that country, to anticipate, as by a substituent and safe inoculation, the more dangerous or mortal assault of scarlatina; a practice by means of which many lives have already been rescued from a premature termination. This homœopathic practice is but a result of the original proposition of Dr. Jenner.

Jenner's immortality is due to this, that he first invented and successfully practised the art of substituting a mild and safe *animal poison*, to effect that modification of the constitution which previously had only been produced by a harsh and often mortal one.

Your committee will not here use arguments to prove that vaccina is a substitute in this operation for small pox; or that it produces, without pain or hazard, an equal, if not superior, protective modification of the physical constitution. They leave this question to be again decided on a review of our correspondence, as it has already been for the millionth time in various parts of the globe.

Much of the hesitation and error at present prevailing among us, has arisen from the circumstance, that the early friends of vaccination, like those of inoculation, believed and boasted too much: they boldly asserted that vaccination was a perfect safeguard in all cases; and that, too, in the face of numerous facts, demonstrably proving that the most violent course of small pox could not always withdraw the sufferer from the power of a

second infection. It is not surprising that the enemies of vaccination should have seized upon the exceptions, to show that, as a part of the doctrine was untrue, the whole might or must be so. Such is actually the state of things in this city; and it seems to us that if the public could be once completely enlightened as to the *real* degree of efficacy, these exceptions would weigh not a feather against the general tenor and amount of our success, absolute and perfect. Mr. James Moore, author of the histories of vaccination and small pox, admits that he had been one of these assertors of indiscriminate success, and notices the ill effect of such mistakes, but he reformed, and corrected his error, as most enlightened persons have done beyond the Atlantic. The miserably lean and meagre state of the medical press in this country, which has given us no copy of those works and many others on the same subject, must be charged with the perpetuation of the error on this side of the ocean; else it would be incredible that so many years of experience and such reiterated announcements should have left any part of the profession in ignorance of their mistake. If the public had been told how far they could rely, they would never have been disappointed.

The varioloid epidemics have produced, it is said, a larger amount of exceptions than had been noticed previously to their occurrence in Scotland and England, where they appeared first about the year 1813, and where they excited the wonder and astonishment of the people, who had so long rested in a confident and undisturbed security under the guardianship of the vaccine.

Your committee are not disposed to deny, that since the year 1813 a far greater number of vaccinated persons have been attacked by a mild and modified small pox, than had antecedently to that year been affected by it; but this circumstance, which has occasioned such great consternation and fear, will, on a candid inquiry, be seen to redound greatly to the credit and promotion, instead of to the defeat and overthrow, of the Jennerian doctrine and practice.

This is undeniably true, as to the popular confidence in Europe; for it may be safely averred, that the varioloid epidemics, especially those of Norwich and Edinburgh, have confirmed and established its credit with the inhabitants, who, while they have beheld the unusual spectacle of a vaccinated individual affected with a mild and modified variola, frequently met with a severer form of the disease in those who had previously undergone the natural or inoculated small pox. Finding an invariable security neither from inoculation nor vaccination, they have learned to prefer the latter, as the most invariable and

complete protection. The documents on the table teach us that the same results are to be expected from the exactly similar occurrences of the prevailing epidemic of this city.

While on this topic of exceptions, it may not be amiss to observe that there are many circumstances to be offered in explanation and excuse of this greatly augmented occurrence of modified small pox. The history of the genuine disease is full of examples, showing its greater violence, prevalence and mortality at one time, or during one epidemic constitution, than another. In some seasons it was a mild and safe disease, if compared with its deadly ravages and infectiousness in others. Possibly, the rare appearance of varioloid eruptions, previously to the outbreaking of the Scottish epidemic, may have depended on the mildness of the antecedent constitution; and it is conceived that this supposition derives support from the exceeding great mortality of small pox occurring in the unprotected since that period, and from the fact that secondary small pox, or that taking place in persons who had previously been variolated, is infinitely more common and obvious, within the last fifteen years, than it had been in any equal previous duration: so common has this occurrence become, that some have imagined a new and undescribed disease, or have regarded it as an epidemic varicella: but without seeking in these phenomena the evidences of a new and unheard of epidemic, we may more rationally refer them to an augmented intensity and malignancy of the variolous miasma. Moreover, has not the precious boon of Jenner lost, by our familiarity with it, some degree of that almost sacred respect with which its inestimable worth ought to inspire the minds of physicians, who are its sole depositories? Did not a long impunity and uninterrupted enjoyment render us forgetful of the precepts of this momentous subject? Hundreds of persons have been vaccinated by those who were totally unqualified to judge of the genuine or faulty character of vaccina. Is there not a common disregard to the state of the skin and the other requisite provisions for its successful application? Do not three or four careless inspections of the vesicle commonly suffice for all attention and cautiousness; and as to the records of cases, what are they more than a loose charge in the day book, or a treacherous reminiscence of a long forgotten and common event?

In addition to the above, we may cite the present condition of the vaccine virus in this country, every specimen of which is probably derived in line direct from original samples sent from Europe a quarter of a century ago. It is a very common and loud complaint that we do not communicate vaccine so

readily and certainly as we could some years since; and one of our respected correspondents, Richard Harlan, M. D. suggests that this may be owing to a deterioration of the lymph. He recommends that it should be regenerated by resorting again to its original source.

Having already hinted at the sentiment which has found some degree of currency, viz. that the existing epidemic owes its rise to a poison different from genuine variola, we will, without entering into a discussion of the subject, remark that, from the documents before us, we remain convinced,

1. That the disease, when affecting persons not previously variolated or vaccinated, is the genuine small pox of authors:

2. That in those who have previously had variola or vaccina, it is small pox modified more or less, by the state of the constitution:

3. That modified small pox, or varioloid, as it is commonly termed, may, as to symptoms, approximate indefinitely near to the clearly defined characters of genuine variola.

With regard to the average number of absolute exemptions from variolous influence obtained by the ordinary practice of vaccination, your committee cannot offer any positive information, for want of official documents. In France, more than two and a half millions of persons remained completely exempt during a lapse of thirteen years. And in this city, small pox found not a single victim in the years 1812, 13, 14, 15, 20, 21 and 22.*

Our present population amounts to about 140,000 souls; and we infer, from the most careful inquiry we have been able to make, that 80,000 of these depend solely on vaccina for their protection against small pox. One hundred persons died here with variola in the year 1827; and although the mortality bills contain no reports under the head of variolid or modified small pox; our documents show that ten persons are said to have died with variolous disease subsequent to vaccination, and that nine perished in the same way after previous small pox. We will examine the pretensions of these cases in another place.

Drs. Mitchell and Bell, in their valuable communication on the epidemic of 1823-4, state that of 248 cases of the disease natural and modified, that came under their notice,

---

* Dr. Luder of Altona states that of 234,959 persons subjected to vaccination in Holstein, from the years 1801 to 1822, only two individuals had been affected with small pox, so late as the year 1824; while in the same period of time, only one person had been attacked by modified small pox, out of 447,605 who were vaccinated in the kingdom of Denmark.

92 proved fatal; to wit, unprotected 85—previous small pox 6—vaccinated 1.—This table alone contains convincing proof of the efficacy of vaccination.

C. Comegys, Esq. President of the Board of Health, obligingly transmitted to us a table (furnished by Mr. Jos. Pryor, clerk to the Board) of the cases of disease reported to the Board since their proclamation in April last.

From the 1st April to 31st December 1827,	
Small pox, - - - - - - - -	181
Modified small pox, - - - - - - -	4
Variola, - - - - - - - - -	6
From 1st January, 1828, to 19th February,	
Small pox, - - - - - - - - -	48
	239
From 1st April to 31st December, 1827,	
Varioloid, - - - - - - - -	124
From 1st January to 19th February, 1828,	
Do. - - - - - - - - - -	49
	173

The respective numbers are 177 and 235.

From the clerk's letter it will be seen, as above, that in obedience to the requisitions of the proclamation, there have been reported, from the 1st of April 1827, to the 19th of February, 1828, 412 cases of disease, under the several denominations of *small pox*, *modified small pox*, *variola* and *varioloid:* but, inasmuch as many practitioners have not reported their modified cases at all, and many persons have had it so lightly as to require no medical prescription, we are led to believe that about 1000 cases of the disease have occurred both under its genuine and mitigated aspect. Supposing then that 235 cases of genuine variola had occurred up the 19th of last month, we have a balance of 765 cases, to place under the heads of small pox subsequent to variola, and small pox subsequent to vaccina. The committee will not attempt an estimate of the numbers appropriate to the two last divisions. They only suggest, that at least 30,000 vaccinated persons inhabit this city. The ratio of the unprotected and variolated is not to be found.

We will now proceed to lay before the society an abstract of the several letters received in answer to our printed circu-

lar, viewing this as the means of communicating the liveliest idea of the actual state of professional sentiment here. In making this abstract many highly interesting details must of necessity be omitted, but it is conceived they will not be lost if securely placed in the archives.

Dr. Atlee, sen. reports no case of genuine small pox after successful vaccination; nor death from modified small pox: but has witnessed one fatal case in an individual who had previously had inoculated small pox.

Dr. Atlee, jr. has seen only one case of genuine small pox in a vaccinated subject. In this case the vaccination had been performed by a "highly distinguished practitioner now deceased," who was satisfied with the vaccine phenomena; but it is worthy of remark that Dr. Atlee found only a *dull white mark* instead of the cicatrix and foveolæ. Has witnessed no death from modified small pox, nor a case of genuine variola after variola: but. "I have seen severe cases of varioloid, after the contagion had been received in either way. None of these were fatal." Lastly, "My own personal observation," says Dr. Atlee, "has in no degree tended to weaken my confidence in vaccination, having tested its efficacy by exposing my own children, and some of my patients, to small pox of a fatal character with perfect impunity."

Dr. W. D. Brinckle, physician to the Small Pox Hospital. "Believing that the lightest case of what has been termed varioloid will produce small pox in the unprotected, I must regard them as the same disease." Premising this explanation, Dr. B. informs us, that he has had under his personal notice 38 cases of small pox subsequent to vaccination—some very violent and some exceedingly mild. What proportion of these would by other physicians have been called genuine small pox, he is unable to say. Dr. B. remarks, that it would be difficult for him to determine whether vaccination had been *properly* performed in these cases. His information, showing that they had been vaccinated, was drawn from the patients, their friends, the cicatrix, and in one instance the vaccinator, a gentleman to be relied on: where the cicatrix was wanting, the case was not considered as a vaccinated one.

Dr. B. states, that he has known no death from modified small pox, and believes no such death has occurred; but has lost four patients with small pox, taken after vaccination, viz. 1. Lewis Jackson (coloured), who was vaccinated in Boston ten years ago, and was doing well until attacked by diarrhea, which carried him off after being 17 days in the hospital. 2. Catherine Brown (coloured) vaccinated 8 years; doing well until an abortion with considerable uterine hemorrhage took place, after which she grow worse and died, being 14 days in the hospital. 3. John Morris (coloured,) and 4 Geo. Epply (white man,) the former vaccinated 7, and the latter 14 years previously, were the other individuals. John Morris was 3 days, and George Epply 4 days in the hospital.

Dr. Brinckle further informs us, that he has had 14 cases of secondary small pox, of which 12 occurred after previous inoculation, and 2 after previous natural small pox. Two of these 14 died, to wit, James Pritchard and Spencer Jackson.

Dr. B. although he admits that the facts which have come under his "personal notice have tended in no small degree" to weaken his confidence in the "efficacy of vaccination as a preservative against the fatal effects of small pox," yet would not have it inferred, that he is "prepared to abandon vaccination, or that its efficacy as a preservative against the fatal effects of small pox is considered by me (Dr. B.) as inferior to inoculation." "Most unequivocally do I avow my conviction, that vaccination is still to be preferred to inoculation." The result of his experience establishes him in the belief that "when the disease occurs in the vaccinated it is usually lighter than when it takes place in the inoculated."

In a second note he says, "I wish it to be distinctly understood, that, until the occurrence of the present epidemic, I never *met with* a case of small pox (neither genuine nor modified) subsequent to vaccination or variolation, although I had seen many of the vaccinated, and some of the variolated exposed to it. On hearing of cases of variola occurring after vaccina, I was therefore led to believe that the vaccination could not have been *properly* performed. But when personal observation convinced me, that individuals, who bore 'prima facie' evidence of having been *properly* variolated, could again have small pox, the conviction was irresistible, that the same thing could *occasionally* happen after vaccination. Impressed with this belief, my confidence in vaccination is in one sense, and only in one sense, weakened. But my confidence in the prophylatic power of inoculation, as well as of natural variolation, has diminished in an equal, if not in a greater degree.

"Decidedly favourable, then, as I am to vaccination, I should really do injustice to the discovery of the immortal Jenner, were I to contend that a properly vaccinated individual could not under any circumstances be subsequently attacked by small pox.

"To conclude,—the result of my present conviction is, that when small pox does not prevail with *unusual malignity* vaccination is a complete safeguard to the constitution. But when small pox does prevail with *unusual malignity*, vaccination, to say the least of it, is still quite as effectual a preservative against the fatal effects of small pox as variolation, whether naturally or artificially induced."

The following additional note will explain itself.

"March 8, 1828.

"Gentlemen,—I understand a report is in circulation, that Dr. Physick's confidence in vaccination has, for the last ten years, been gradually diminishing. Knowing the report to be without foundation, I unhesitatingly assume the responsibility of stating most explicitly,

"1. That Dr. Physick's confidence in vaccination has not been diminishing for the last ten years.

"2. That Dr. Physick has as much confidence in vaccination now as he ever had.

"3. That, as an evidence of Dr. Physick's *confidence* in vaccination, he still continues to recommend it.

"I have the honour to be, gentlemen,
"Very respectfully,
"Your obedient servant,
"W. D. BRINCKLE."

"Drs. Meigs, Coxe, and Condie,
"Committee from Medical Society."

Dr. Henry Bond, in five years last past, has had two cases of small pox after reputed vaccination. One of these was a boy eight years old, vaccinated four years before by a physician who had no record or remembrance of the fact; his arms had no cicatrix, and his friends were of the very lowest class. This patient died, when the secondary fever supervened, of what appeared to be genuine small pox. The second case described by Dr. Bond, from the early fall of the crusts, &c. seems to have been very much modified. His patient recovered. The committee consider these cases as not at all inconsistent with the assertions of Dr. B. that he has seen no case where there was danger of death or deformity in an individual who had been undoubtedly vaccinated. He states that he could cite numerous cases in proof of the protective efficacy of vaccination, but deems it unnecessary to do so.

Dr. John Barnes relates his experience as having been derived from the occurrence of small pox and varioloid disease to the amount of between two and three hundred cases, and replies to the whole of our queries—*None.*

Dr. John Bell has seen cases of eruptive disease, resembling small pox in

all essential particulars, after vaccination; the evidence of this operation being derived from the scar, or the information of parents or friends: but he has seen no instance of death from the abovementioned cases. He has had no case of secondary small pox during the present visitation. He refers to the four examples of this sort, of which a history has already been given in Mitchell and Bell's account of the small pox of 1823–4. See the North Am. Med. and Surg. Journal, Nos. 1 and 2.

Although, of a given number of cases of small pox after vaccination, he has seen more violent attacks this season than in the former epidemic: yet, on a review of the whole evidence, not inconsiderable, he can confidently assert that no facts have come under his personal notice, tending in any degree, to weaken his confidence in the *efficacy* of vaccination as a preservative against the *fatal effects* of small pox. Wherever the danger (with one exception) has been imminent, he has had good reasons to doubt if the vaccination was properly performed. In these doubtful cases (which have all recovered) the symptoms were such as in unequivocal small pox would have augured a fatal termination.

Dr. Franklin Bache has seen no case of genuine small pox occurring after vaccination or precedent variola, nor death from modified small pox. To the sixth query he replies negatively.

John R. Coxe, M. D. Professor of Materia Medica in the University of Pennsylvania.—We have been favoured by this gentleman with a most interesting communication, in which we find abundance of both facts and arguments, to corroborate the testimony which he has precedently given on the subject of vaccination. Dr. Coxe may be regarded as the founder of vaccination in Pennsylvania.

"Twenty-six years," says he, "have just elapsed, since I first succeeded in introducing the vaccine disease into Philadelphia: a new generation has within that period sprung up, who owe their safety from the small pox to the former disease. If we suppose the population of Philadelphia to amount only to 120,000, we shall probably not err in stating the vaccinated portion at one half: we have had, in the period named, the small pox several times amongst us; but, although the inoculation for that disease has been long suspended, except as a test after the vaccine, we have never seen it spread amongst that immense number who have been vaccinated! Is it possible to imagine that one half of a city, like Philadelphia, could have so entirely escaped the ravages of an epidemic, if they had not securely opposed the egis of Jenner to that loathsome and dangerous disease? Where are the numerous vestiges, *now*, of its frightful ravages. It is now as *rare* to see a person disfigured from the small pox, as it was *common* formerly." . . . . . "It will, I think, be found, that the description of varioloid is very similar to that of many of the cases of small pox as laid down by the old writers on the subject; and more particularly of some of those anamalous ones, which were apparent in almost every epidemic described. It is well to remember, that few physicians now living have ever witnessed such an epidemic; and our knowledge must be derived from a close comparison of our so called cases of varioloid with the accounts handed down to us by those who have witnessed small pox in every shape and feature. Let such a comparison be strictly instituted between the accounts left us by Sydenham, Morton, and writers even preceding them, and those of varioloid and modified small pox of the present period, and a strong analogy will be found to exist between them."

We will cite further, from professor Coxe's communication, the following: "There is perhaps no individual in the United States, probably in the world, who has a more undoubted right to question the assertions made against vaccination than one of the members of your committee. Himself, one of the earliest of those subjected to its influence, now upwards of 26 years of age; (he was) immediately afterwards submitted to every possible

means of variolous infection. Inoculated during a successive series of years, probably, at least fifty times by myself and subsequently repeated by his own hands; he was likewise exposed for a considerable time, and held in the arms of an individual in the most malignant state of small pox, not more than ten weeks after the termination of the vaccine.

"This, together with numerous other trials on the subject made with every possible care and precaution, many of which are detailed in my treatise on vaccination published in 1802, fully satisfied my mind, that the vaccine was entitled to every praise, as a preservative against small pox, which had been ascribed to it by the illustrious Jenner." He proceeds to state that he has no reason to believe that any case that has thus come under his care has been affected subsequently with what is termed the varioloid. The committee regret that they cannot include the whole of this very interesting communication in their report. They hope it will be given to the public in a separate form.

Dr. D. Theodore Coxe has seen no genuine small pox after vaccination, nor death from modified small pox—has seen three cases of variola subsequent to inoculated variola. One (an old black) died. He does not feel assured that this man had ever been truly affected with the disease. His confidence in the protective efficacy of vaccine complete.

Dr. Comstock reports, that no facts have come under his notice which diminish his confidence in regard to vaccination.

Dr. D. Francis Condie, physician to out-door poor for the western district of Southwark, has seen a majority of the patients who have been sent from his district to the hospital, in addition to those occurring to him as a physician to out-door poor, and in his private practice. Views the disease in the unprotected as genuine variola. States that such cases in 1823–4 very generally terminated fatally; but during the recent prevalence, such have for the major part recovered.

In the same neighbourhood and families with the above, many vaccinated and inoculated persons were affected with a modified disease, in which the eruption appeared sooner, was attended with less inflammation and milder constitutional symptoms: the course was completed in from five to ten days, giving evidence of no fetor, secondary fever or cicatrices.

In vaccinated persons this affection required little remedial treatment, and where Dr. C. had vaccinated the individuals himself, and was satisfied with its genuineness, their attacks were invariably mild, with few eruptions on the face, breast, and arms.

Cases of modified disease, subsequent to small pox inoculated or natural, were more violent as to eruptions, inflammation, constitutional disturbance, and duration.

Dr. Condie has lost only one patient affected with secondary small pox. The man was 35 æt. and bore in his face the marks of the antecedent attack, which had been sustained in his youth.

As to the protection derived from small pox, the Doctor thinks his personal experience warrants him in believing, that, if not more liable to the disease a second time, those who have had it once are in "case of a re-attack certainly less fully protected from a fatal result than those who have undergone vaccination."

On the question of identity of the poison which produces variola and its modifications, he cites in proof of it the following cases. Mrs. Pritchett, a vaccinated person, severely attacked with the modified form on the 15th October, 1817—she was well in ten days. On the 19th idem, her daughter, 3 or 4 æt. and unvaccinated, was seized with small pox, and on the 14th day died. A sister of Mrs. P. æt. 16, vaccinated, was also seized on the 19th, with the modified form. On the 1st of November, Mr. P. the husband, æt. 35, pitted with previous small pox, was taken sick; and died on the 16th day. A few days after, Mr. P's. son, æt. 10, unprotected, was attacked by

natural small pox, and died on the 10th day of the eruption. Dr. Condie's communication contains several other examples of similar scope and tendency. Our report will not admit of the details.

His own practice affords also very decisive proofs that the vaccine impression does not wear out or lose its protective efficacy by lapse of time, as he has seen the disease equally violent and equally mild at every period after vaccination, from a few days to twenty years.

Finally, he "conscientiously and deliberately" asserts, that he knows no circumstance calculated to weaken his faith in the preservative efficacy of genuine vaccination against the fatal effects of small pox.

Dr. E. Jenner Coxe has seen no case of genuine small pox subsequent to vaccination or variolation, nor any death from modified small pox. He regards vaccination as capable, when successful, "of imparting to the system a certain power capable of resisting an attack of *genuine* small pox, or rendering a recovery from modified small pox or varioloid absolutely certain."

Dr. B. H. Coates reports no unmodified cases after vaccination, but has seen numerous modified cases of various severity, yet none of them fatal. Has seen no case of any sort after variola. Experience has greatly confirmed his impressions as to the propriety of vaccination as a preventive of small pox; all the cases he has witnessed being incomparably milder than mere variola.

W. P. Dewees, M. D. adjunct professor of midwifery in the University of Pennsylvania, has seen no genuine small pox after vaccination, no death from modified small pox, nor variola subsequent to inoculated small pox. Nor, continues the professor, "any thing, tending in any degree to weaken my confidence in the efficacy of vaccination as a preservative against the fatal effects of small pox."

Dr. W. B. Duffield has had many cases of small pox after vaccination, all very mild, except one which was a very bad case, but recovered. The above had been all properly vaccinated. Has seen no death from "meliorated small pox." Never knew a person to have small pox twice. As regards the sixth question, "I say I have confidence in vaccination, though not of the same kind I had when it was first introduced, because I then believed that all who were properly vaccinated would be forever and entirely preserved from small pox; this, however, I find not to be the case. I am, nevertheless, an advocate for vaccination."

Dr. S. Emlen, one of the physicians to the Pennsylvania Hospital, has seen no genuine small pox after vaccination, during the recent occurrence of small pox here. All his modified cases exceedingly mild, neither has he seen any secondary small pox. Dr. E. never knew a fatal termination of varioloid; which, in those patients he had himself vaccinated, has been attended with indisposition as slight as accompanies the most trifling forms of eruptive disease. Says he should, in fact, have called them varicella, had not the source of the contagion been, manifestly, small pox; in some instances, the natural small pox having been present in the house. The disease in children so circumstanced has exhibited great variety, from a simple rash up to the mildest form of variola.

Dr. Benjamin Ellis states, that he has seen only one case of genuine small pox after vaccination; the only evidence of the operation being derived from the girl herself, a negro—she recovered. No death from modified small pox. A case of small pox proved fatal in a boy in the year 1823; his mother said he had been regularly inoculated in Ireland. The eruption was confluent. Instead of any circumstances to weaken his confidence in vaccination, he has observed many that confirm his previous opinion of its superiority over every other preservative, and of its absolute power to modify and disarm small pox of its fatal character.

Dr. S. M. Fox has seen cases of small pox after vaccination, but very ge-

nerally mild and modified; he felt satisfied from testimony, and the comparative mildness of the disease, that vaccination had been properly performed. This gentleman says, "one case of death has occurred under my personal notice from small pox after vaccination: this was a case of confluent small pox, the eruption flat, depressed and of a very bad appearance, slight fetor was observed for a day;—great soreness of the throat, difficulty of breathing and of deglutition, with stupor, were the symptoms of the latter period. This case terminated fatally on the 11th day. The patient had been vaccinated in childhood by a late physician of great eminence." Has seen no case subsequent to variola, but had seven patients of this class in 1823-4: "were said to have been inoculated:" one died: he had no scar from inoculation, but he and his friends were positive as to his inoculation. Dr. Fox thought it very doubtful. States that he considers vaccination as the best preservative we are possessed of against the fatal effects of small pox.

Dr. L. P. Gebhard had a case of confluent small pox in a female adult: had been vaccinated 20 years—but in consequence of the eruption, could discern no scar. She had no unpleasant odour nor pits—recovered. Is not sure as to her having been properly vaccinated, but thinks the case was somewhat modified. His confidence in vaccination remains undiminished.

Dr. Richard Harlan, one of the surgeons of the Philadelphia Alms House, reports two cases of varioloid disease: one in a female, who insisted that she had sustained natural small pox in infancy; it was severe but not fatal. The second (mild,) in a gentleman who had been undoubtedly inoculated. His cases of varioloid, after reputed vaccination, have all recovered. Never had varioloid in a patient vaccinated by himself. Has of late years experienced great difficulty in procuring successful results from the use of vaccine matter, although carefully selected. After failing eight or ten times (with the crust,) has never failed in the first attempt with fresh lymph taken about the 8th day. Has seen no case of varioloid after vaccination, within 12 years of vaccination. States his confidence in genuine vaccination as undiminished, but thinks the virus ought to be renovated by taking it again from the cow.

Dr. Thomas T. Hewson, one of the surgeons to the Pennsylvania Hospital, being charged with investigations on the subject of variola, &c. by another institution (the College of Physicians,) only answers to the last query, that his confidence in the protective powers of vaccination remains undiminished.

Dr. R. M. Huston has seen no genuine small pox after vaccination, nor death from modified small pox. Two cases of small pox after variola—none dead. His confidence in the vaccine protection confirmed.

Dr. W. S. Helmuth, vaccine physician for Moyamensing, has seen no genuine small pox subsequent to vaccination. No death from modified small pox. One case of genuine variola after natural small pox—the patient recovered. His confidence in vaccination confirmed by daily observation.

Dr. H. L. Hodge, one of the physicians to the Philadelphia Alms House, has seen one case of "apparently genuine" small pox after vaccination; the patient had a cicatrix from vaccination, but not well characterized. He has seen no fatal case of modified variola, no secondary small pox, and notices the protective power of the Jennerian method, in rendering mild and gentle a disease which is destroying "one half of its unprotected subjects." He considers vaccination as "far preferable" to inoculation under the most favourable circumstances.

Dr. W. E. Horner reports three instances of small pox occurring after vaccination. The vaccination probably perfect, as Dr. H. cites a physician of great repute as the vaccinator in two, and in the third case there was a cicatrix. Has seen no fatal case of small pox, and consequently, his confidence in the efficacy of vaccination, as a preservative from the fatal effects of small pox, is not shaken by his private experience.

Dr. Isaac Heylin, early acquainted with the preservative powers of vaccination, having frequently subjected his patients to the test of inoculation,

without in any case producing variola. He considers an effectual vaccination as equal in efficacy to inoculation or natural small pox.

Dr. Thomas C. James, professor of midwifery in the University of Pennsylvania, has seen a few cases of mild small pox after vaccination. The eruption ran through its stages more rapidly than in genuine variola: there was no peculiar odour and no secondary fever. In the cases above alluded to, he says, that vaccination was performed either by himself or by friends in whom he places confidence; and that it was strictly satisfactory at the time. Has seen no death from modified small pox: no case of small pox after previous inoculated or natural small pox. And finally, no case has come under his personal notice to weaken his confidence in the efficacy of vaccination as a preservative against the fatal effects of small pox.

Dr. Harvey Klapp, vaccine physician for Southwark, saw a fatal case of small pox subsequent to vaccination; the operation having been performed fifteen years before, as it was said. He also saw a fatal case of secondary small pox, in which the patient died on the sixth day of the eruption. Has had another case after previous natural small pox, but the person recovered. Says he has seen more cases of modified small pox after vaccination, than after inoculation, owing to the greater number of vaccinated persons. The disease has occurred indifferently from three months to twenty years after the insertion of the vaccine virus. Remarks that he has seen only one case tending to weaken his confidence, and that one doubtful.

Dr. John K. Mitchell, one of the physicians to the Pennsylvania Hospital, refers us to Mitchell and Bell's paper in the first and second numbers of the North American Medical and Surgical Journal, for an exposition of his opinions and the facts on which they are founded, and avers that his confidence in "vaccination has been confirmed by his subsequent experience." He prefers vaccination to inoculation, under all circumstances.

Dr. George Mifflin has seen no small pox after vaccination; from modified small pox no death, nor small pox after variola. His confidence remains unshaken.

Dr. Charles Mifflin reports that no genuine small pox, after vaccination or variola, has come under his personal notice; nor any case of fatal modified small pox. No facts have come under his personal notice to weaken his confidence in the efficacy of vaccination, as a preservative against the fatal effects of small pox.

Dr. Thomas D. Mitchell, of Frankford, notices the modified small pox as it occurred at Frankford, in this vicinity, and refers to his essay published in the Medical Recorder for 1822. His opinion as to the preservative efficacy of vaccination has not been in the least changed.

Dr. John Wilson Moore has seen a number of cases of small pox subsequent to vaccination; some of a confluent character; in a few instances he could not discern that vaccination had exerted much, if any influence. Supposes generally, that they had been well vaccinated. Three cases were mortal. One was a male, æt. 19, vaccinated when a lad, first seen on the 6th day of eruption, and he died on the third or fourth, of desication. This one occurred in 1824. In 1828, attended a female, æt. 18, who had been vaccinated when a child in the Pennsylvania Hospital, and (so said the parents) in a satisfactory manner. She had a cold when she was taken sick with the varioloid, and when the doctor saw her on the third day of the eruption, "she was labouring under a state of *pneumonia typhodes*." She died two days afterwards, which was the fifth of the eruption. The last was in a coloured woman, æt. 22, vaccinated *in the country when a child*. Dr. M. saw her on the sixth or seventh day of the eruption; pock turned on the ninth; when she appeared to be doing well. Fever ensued, with delirium, and she died on the sixteenth day.

The same gentleman reports two cases of small pox after inoculated va-

riola, but no deaths under that head. His confidence is weakened—he early viewed it as an entire preventive of small pox infection. He states that he knows of no death where there has been "professional assurance of satisfactory vaccination."

Dr. Henry Neill has seen one case of genuine small pox after vaccination. No death from modified small pox. Two cases of modified small pox after precedent inoculated variola. Dr. N. informs us that having seen genuine small pox after vaccination, and very alarming modified variola after inoculated small pox, he supposes neither vaccination nor inoculation are *infallible preventives* of the fatal effects of our disease.

Dr. John C. Otto, one of the physicians to the Pennsylvania Hospital, has seen many cases of what is usually termed varioloid, which he regards as small pox "mitigated by successful vaccination." The disease, though very generally mild, short, and safe, was, in a few persons, of a more severe character; not distinguishable from a very high grade of natural or inoculated small pox, excepting in its shorter duration. They had confluent eruption, salivation, sore throat, swelling of the fauces, blindness from tumefaction of the face, and strongly marked secondary fever. There was also permanent pitting, and, in one instance, bloody urine. In these cases there could be no doubt of an antecedent genuine vaccination. These examples furnish no instance of a fatal termination. Dr. Otto, since he has been in practice, has had at least five persons affected with small pox, who said they had had it before; in all of them several years had elapsed since the inoculation, and they had in the interval been exposed to the infection without taking it. When they took it last they knew not the source of the contagion.

These cases only occurred in years when small pox was unusually general and malignant.

All the cases were dangerous, and one female died. She communicated the disease to her five vaccinated children, three of whom had it confluent—they all recovered.

Dr. Otto is not induced, from all he has witnessed, to relax in his efforts to disseminate vaccination as widely as possible. He recommends it exclusively to the patronage of the public.

Dr. Ph. Peltz, jr. No case of genuine small pox after vaccination, nor fatal modified small pox. A few cases of genuine variola after inoculation, and a fatal one after natural small pox. His confidence strengthened.

Dr. J. Rodman Paul relates the history of natural and of modified small pox cases occurring in the family of John Havenstrite of Philadelphia, which was composed of ten individuals, viz. three inoculated, four vaccinated, and three unprotected. Of the latter two were twins two months old, and one about two years of age.

The disease first attacked a boy of twelve years æt. who had been vaccinated when an infant. It was a severe but modified case; recovered. The mother of the twins refused to have them vaccinated; they took the disease, and both perished. The other child was subjected to the vaccine influence which went on in its regular course until the thirteenth day, when he had accession of fever, followed by four or five varioloid pustules, requiring no treatment—he recovered.

The three vaccinated members of the family also had varioloid eruptions of a mild character. The mother who was inoculated, suckled her twins; she had fever, but no eruption for some days; when her nipples became sore, and a number of varioloid pustules appeared on the breast only. The other two inoculated persons escaped.

Dr. Joseph Parrish, one of the surgeons to the Pennsylvania Hospital, has seen two cases of small pox after reputed vaccination, and both proved fatal. One of these cases is reported above by Dr Fox. Dr Parrish is unable to give any clear opinion as to the genuineness of the vaccination in the other case. Does

not recollect ever having seen a fatal case of modified small pox or rather varioloid. Has seen three cases of secondary small pox, two of which were fatal. Two had been inoculated and one had suffered natural small pox. "My confidence," says he, "in vaccination, as a preservative against the fatal effects of small pox, still continues firm—the few exceptions do not impair in my mind the efficacy of the general rule, and the same exceptions apply to inoculated and even natural small pox. Hence, as vaccination is entirely free from all risk of life, and from the power of communicating a fatal disease to others, I consider its superiority in every respect most decided."

Dr. JOHN RUAN has seen no case of mortality from modified small pox, and states his confidence in the prophylactic powers of vaccination, to be not in any degree weakened by his past experience.

Dr. J. C. ROUSSEAU has seen no case of varioloid in any individual vaccinated by himself. No death from modified small pox: has seen violent cases of secondary small pox, but none mortal. His confidence is firmer than ever.

Dr. THOMAS SHIVERS. No genuine variola subsequent to vaccination, but has had three cases in persons previously inoculated, one of whom died. Regards vaccination as the only secure prophylactic. As instances of the malignant nature of the prevailing small pox, we will cite from Dr. S.'s letter to the committee, the following: "Of seven cases that I have had this season of natural small pox, in subjects who had never been either vaccinated or inoculated, *all have died;*" while of about forty cases in persons vaccinated, not one has perished.

Dr. W. SHAW informs the committee that he has seen no genuine small pox after successful vaccination. Has vaccinated several thousands since the year 1802, and has heard of no instance of small pox occurring in one of these subjects. No death from modified variola. Of two instances of small pox occurring after inoculated variola, neither proved fatal. His early experiments with genuine variolous matter, as a test for vaccination, established his conviction of its efficacy, and he still has the fullest faith in it.

Dr. SAMUEL TUCKER. No case of genuine small pox subsequent to vaccination, nor death from modified small pox, or case of secondary small pox, has fallen under the notice of this gentleman, who informs us that nothing has occurred in his experience to weaken his confidence in the vaccine protection.

Dr. G. B. WOOD. Out of twenty cases of varioloid after vaccination, *one* presented all the symptoms of genuine variola, with the exception that none of the peculiar odour was discernible. This patient had the scar, and said she was vaccinated when a child—recovered. No death from modified small pox. Of three persons precedently inoculated, two had varioloid, and one genuine variola: the man, æt. thirty-five, and intemperate, died. Has seen in his own practice nothing that could justify an opinion that vaccination is not an effectual preservative against the fatal effects of small pox.

Dr. JOHN WILTBANK. J. P., a coloured man, æt. twenty-five, had pain in the head, breast and side, dyspnea, high vascular excitement, and all the symptoms of pleurisy. On his arm was a fine vaccine vesicle nine days old. This man was vaccinated on the Monday, seen on the Tuesday week following, when he was bled, blistered and used diaphoretics. On that day a copious eruption of variola presented itself, which proved confluent, and he died on the fifth day. Dr. W. adds that the above case is the only one that he has seen, to diminish confidence in the protective efficacy of the vaccine disease.

Dr. THOMAS H. YARDLY, answering negatively to our queries, concludes

with assurance of his reliance on vaccination as a protection against small pox.

From the above condensed view of the testimony furnished to us by a very great number of highly respectable practitioners, the committee were tempted to trespass no further on your time by presenting additional observations, being persuaded that no candid mind could remain in doubt, either as to the value of vaccination as a prophylactic in the case under consideration, or as to the sentiments of the medical profession in this city towards it; but, although not one dissentient voice has been raised, it is deemed proper to make a few further remarks. And,

1. These documents show that varioloid disease has attacked both variolated and vaccinated persons.

2. Of the whole number of variolated cases, say seven hundred and sixty-five, far the largest proportion occurred in vaccinated persons, a circumstance which, as a naked proposition, might tend to exalt the public confidence in inoculation at the expense of vaccination. Now, although we are unable to ascertain with any pretensions to preciseness the just allotment of the two orders of cases, enough has been said, to indicate that the susceptibility to *varioloid* is not very greatly different under both sorts of protection. It is highly probable that at least eighty thousand vaccinated persons reside in this city; while there are not more than twenty thousand, and probably even a smaller number of variolated persons; hence, on the supposition of an exactly equal susceptibility, we ought to find four cases of varioloid after vaccine, to one case of the same affection subsequent to variola.

In the documents, ten deaths are reported as having occurred from small pox subsequent to vaccination, while nine are cited as proofs of the failure of variola to protect the constitution. Let us examine a little the circumstances of the ten fatal cases, and we shall see if they can be fairly cited. For example, out of the four reported from the personal observation of Dr. Brinckle, one, Catharine Brown, was doing well until an abortion with uterine hemorrhage took place, after which she changed for the worse and finally lost her life.

The cases of Epply and Morris, which were under treatment four and five days respectively, are liable to be questioned. No positive record is given of their having been vaccinated: the only assurance is derived from their own assertions. Even the case of Spencer Jackson, who died in the hospital seventeen days after his admission, is obnoxious to the same doubts, in consequence of its protracted duration. And it is easier to believe that all these individuals had undergone a spurious form of vaccine than that vaccine should have failed to protect them.

Dr. Bond's case is considered by him as extremely questionable. Dr. Fox's case may be admitted as an example of death from small pox subsequent to vaccination. The known character of the eminent and conscientiously cautious individual who had vaccinated the unfortunate gentleman, forbids us to doubt that he considered his vaccination perfectly satisfactory, or that he could be mistaken in its character.

Dr. Klapp's case is stated by him to be doubtful. Of Dr. Moore's fatal cases only two occurred in 1827, 8. The woman when taken sick was suffering under a cold, and was labouring under an attack of pneumonia typhodes when the Dr. saw her on the third day of the eruption: she died on the fifth day. The second woman died, on the sixteenth day, of a secondary fever, which came on after the pock turned.

There will be no reason to charge the committee with want of candour, if they reject both these examples of death from small pox after reputed vaccination. The pneumonia typhodes has no necessary connexion with variola, and the woman's death ought rather to be charged on that terrific complication than on an implied impotency of the vaccine. The second

case, from its long duration and other phenomena, seems to have been an unmodified small pox. No fatal case of modified small pox has been adduced. In neither case is there furnished an authentic record of the vaccination,—which ought therefore to be deemed hypothetical. Lastly, Dr. WILTBANK'S case, occurring before the constitution had been modified by the maturity of the vaccine vesicle, proves nothing against its value and efficacy.

Thus we may, without the least want of candour, come to the conclusion, that only one death from small pox after vaccination has occurred in Philadelphia during the year 1827, among eighty thousand vaccinated persons, and during the prevalence of a most malignant and mortal small pox, while several individuals have lost their lives from small pox after they had already gone once through the disease. It appears then clearly that vaccination ought to lose nothing of the public confidence; and, as a protection from the fatal effects of genuine small pox, it may safely be asserted, that it is in every sense to be preferred to inoculation.

Let the public be well informed with regard to the real degree of efficacy of the vaccine virus—let them be no longer told, it will positively shield them from the assault of small pox in any shape and every instance. They will confide in it, if we point them to the physicians who rely on it for the safety of their wives and children, and, defended by "the egis of JENNER," walk unharmed themselves amidst the arrows of pestilence and death.

EDWARD JENNER COXE,
D. FRANCIS CONDIE,
CH. D. MEIGS.

* * The committee have received several communications, in reply to their queries, since the above report was finished; and they regret that the lateness of the period at which they arrived prevented their incorporation into the body of the report. The writers are Dr. W. CARLL BREWSTER; Dr. J. GREEN; Dr. JOSEPH HARTSHORNE; Dr. B. S. JANNEY; Dr. JOSEPH G. NANCREDE, vaccine physician for the city; Dr. O. H. TAYLOR; Dr. H. WALTON; and Dr. J. UHLER, Jun.

We can only briefly state that they support by their communications the whole mass of the evidence given above. Their experience (in some very considerable) has not, in the least degree, tended to destroy their confidence in vaccination; whose preservative efficacy has been found sufficient, by a part of these gentlemen, to defend them from the contagion of small pox, though repeatedly exposed to it in their professional intercourse with the sick. Their letters are submitted, with the rest of the documents, to the disposal of the Society.

REVIEWS.

Quidquid venerit obviam, loquamur
Morosa sine cogitatione.—*Martial.*

ART. XI. *The Anatomy of the Brain, with a general view of the Nervous System.* By G. SPURZHEIM, M. D. Translated from the unpublished French Manuscripts, by R. WILLIS. London, 1826. p. 234.

FEW names in our profession have become more familiar to the public, and at the same time been treated with less respect, than that of Dr. Spurzheim. To the great mass of those who have heard of him, including not a few of the medical profession, he is known only as the most noted teacher of phrenology. They associate with his name, only the extravagancies and dubitable parts of that dubious science; and seem to regard him as one of those fanatics in science, who are incapable of discriminating between the chimeras of their own heads, and the facts and doctrines of true philosophy. But those best acquainted with the progress of medical science in our own day, must acknowledge, that, for the light thrown upon the anatomy and physiology of the brain and nervous system, we are greatly indebted to Drs. Gall and Sphurzheim. What they have not accomplished, has been done by others, who have followed them in the same career. Those who read the volume now before us, will discover in the author, a disposition to discriminate carefully between fact and conjecture.

In the preface, the author states the special object of this volume to be, "to make known the structure of those organic apparatuses, which are indispensable to mental manifestations. It is only in our own times, that their structure has been discovered, and that new and unthought of functions have been proved to belong to them." He pronounces Dr. Gall the ori-

ginal author of a new physiological doctrine of the brain, the discovery of the ground work of which belongs entirely to him.

"The mechanical direction, which the anatomical investigations had taken, did not appear to me (says Dr. Spurzheim) satisfactory. Guiding myself in my inquiries, by physiological views, always comparing structure with functions, I discovered the law of successive additions to the cerebral parts; the divergence in every direction of the crural bundles, towards the convolutions; the difference between the diverging fibres and those of union; the generality of commissures; the true connexion of the convolutions with the rest of the cerebral mass, and the peculiar structure which admits of the convolutions being unfolded, (an event that occurs in hydrocephalus of the cavities) whilst the mass lying at their bottoms, and belonging, for the most part, to the apparatus of union, or of the commissures, is pushed by the water between the two layers composing them: lastly, I demonstrated the structure of the nervous mass of the spine, and I flatter myself with having arrived at the best method of dissecting the brain, and exposing the parts." p. 12.

"I confess," says Dr. S., "there is great satisfaction in the consciousness of having contributed to the important reform, that has been effected in regard to the nervous system. I am only sorry to observe, that many of the ideas of Dr. Gall and myself, are appropriated by the authors of recent publications, without any mention of the source from which they are derived, or of the individuals who first struck them out, or reduced them to certainty by direct proofs. *We are commonly enough mentioned, it is true, when such of our assertions as appear weak, are the subjects of criticism, but our names are kept in the back ground, when points of importance, become matter of discussion.*" p. 15.

The anatomy of the brain, and nervous system, as well as anatomy in general, may be considered as either descriptive, physiological, comparative, or pathological. The nomenclature of the encephalon of itself, suffices to show, that physical appearances, such as the form, the size, and colour of parts, the tissues which compose them, and their connexions, had principally guided anatomists in the study of its structure. This is simple descriptive anatomy, of which the author, in the work before us, takes only such notice, as may be necessary to recognise the parts spoken of in his physiological and pathological considerations. In the volume before us, how-

ever, little attention is devoted to pathological anatomy. For this, he refers us to his work on insanity.

"The object of this compendium," he says, "is to present the principal views that may be taken of the *physiological* and *comparative* anatomy of the apparatus destined to the affective and intellectual manifestations. It will be found divided into nine sections. In the first, I make some general reflections on the nervous system; in the second, I speak of the division of the nervous apparatus; in the third, I treat of the nerves of voluntary motion, and of the external senses; in the fourth, I discuss the best mode of examining the structure of the brain; in the fifth, I describe the cerebellum particularly; in the sixth, I do the same in regard to the brain; in the seventh, I examine the commissures; in the eighth, the communication of the nervous parts with each other; and in the ninth, I go into some anatomical points, connected with physiology. The work will prove, that I rather adhere to philosophical views and principles, than of mere description of the physical qualities belonging to individual masses;—I have endeavoured, in an especial manner, to class together the parts that constitute particular apparatuses, a practice which, to our predecessors, was entirely unknown." p. 23.

In his general considerations, he maintains, that the nervous system comprises two distinct substances; the one gelatinous, or pulpy, and usually of a grayish or brownish hue; the other, fibrous, and of a more or less perfect white colour. They are commonly spoken of in books, as the cineritious and redullary substances.

The disagreement among anatomists, with respect to *the constantly conjoined existence of the two nervous substances*, arises, he thinks, in consequence of more attention being given to the colour, than to the nature of the pulpy substance. Pulpiness, not colour, is its distinguishing character. The pulpy substance never of itself composes an isolated unit or whole; it is always in connexion with white or fibrous substance. Occasionally it lies in masses of varying magnitude, and again it occurs in layers, or it runs along in slips, following the nerves in their course. Its intimate structure is unknown, and all that can be said of it, is, that it has an immense quantity of blood-vessels distributed through it.

Anatomists have differed extremely in their notions of the intimate structure of the white, or second kind of nervous substance; but Drs. Gall and Spurzheim espouse the opinion that it is fibrous. It seems to them, from several circum-

stances, that the pulpy nervous substance is the source and nourisher of the white fibres. They do not, however, wish to be understood as advancing this as a fact; but they suppose that each nervous apparatus is composed of the two peculiar substances, the pulpy and the fibrous, and that both are necessary to produce an instrument adequate to perform a particular function.

After stating his reasons for not considering the brain as the origin of the nerves, Dr. S. says, "the first anatomical principle in regard to the nervous system therefore is, that *it is not a unit, but consists of many essentially different parts, which have their own individual origins, and are mutually in communication.* This principle Dr. Gall and I regard as essential to our physiological researches and deductions. No anatomist before us was ever so much interested in demonstrating its truth. We conceive we have proved it satisfactorily in regard to the brain, as Bichat had done before us, to the nerves of the chest and belly." p. 14 and 15.

"The opinion in regard to *the use of the ganglions,* which Johnstone, Bichat, and Reil entertained, (viz. that they serve to isolate from the influence of the brain, the parts which receive nerves from them,) is," says Dr. S., "by no means exact. They do not interrupt the reciprocal influence of the brain and nerves of the spinal cord, nor of the brain and viscera of the chest and belly, either in the healthy or pathological state of the body. They most certainly do not prevent impressions, made upon parts supplied with nerves from them, or diseased sensations of the viscera, from being felt. On the contrary, the ganglions would appear essential to the structure of the nerves of sensation. They, however, abstract the parts they furnish with nervous energy, from the influence of the will. They also originate nervous fibres, and serve, farther, as points of communication between different nerves. Lastly, as the existence of a nervous fluid is not impossible, nay, as in all likelihood such a fluid does exist, the ganglions may probably aid in its secretion or evolution, and modify its circulation or distribution." p. 22.

Our author maintains the necessity of subdividing the nerves of voluntary motion, and of the external senses, and of admitting separate fibres for the functions of touch and of motion. It was long ago remarked, that feeling and voluntary motion were not always impaired or annihilated simultaneously; sometimes the one, sometimes the other of these functions was seen to be totally lost, whilst the other remained unimpaired. The conclusion then followed, that there were nerves of motion, and nerves of feeling. This point he

discusses at length, and answers the objections to his view, supporting it by facts and arguments. He concludes by saying, "It must be evident that I do not doubt the presence of two distinct species of nerves among those, that issue from the spinal canal in particular, one propagating impressions from without, the other conveying the dictates of volition, in regard to motion, from within. This subject, however, is obviously involved in much obscurity, and will require ulterior and farther investigation to render it clear." p. 36 and 50.

The canal of the spinal cord has given rise to much discussion, and nothing certain, we are told, is even now concluded in regard to it, neither as to the space it occupies, nor to the mode of its formation. After stating the views which he advanced on a former occasion, the author says, "I now consider the canals to be mere effects of blowing. I have produced them in birds and fishes, as well as in man. They are not, however, I must here observe, to be confounded with the true canal of the spinal cord;—the canal that exists in the interior of the commissure or apparatus of union." p. 55.

In his general considerations in regard to the spinal cord, the author points out some errors in the views of MM. Serres, de Blainville, and Dr. Bailly, and concludes by saying, "In my opinion, the spinal cord is, 1st, the origin of the nerves styled spinal; 2d, an apparatus that contributes to muscular and sensitive powers; and 3d, a means of communication between the cerebral operations, the sense of touch, the power of motion in general, and the functions of vegetative life collectively." p. 60.

"It is a mistake," he says, "to confound the part called medulla oblongata and the spinal cord together. The medulla oblongata is not a separate and particular nervous mass: it gives origin to the nerves above mentioned, and also to the fifth pair; but there is yet one portion of each of its halves, which belongs, decidedly, to the cerebellum, and another, which pertains to the brain." p. 69.

"The mode of indicating the several pairs of nerves numerically, and speaking of the first pair, the second pair, the third pair, and so on, possesses no practical advantages," he says, "because, besides the number, the functions of each pair must still be learned. It is better, therefore, to designate each pair of the cranial nerves in succession from its function, or its destination. Some authors have divided the nerves according to their places of detachment, into nerves of the brain, of the cerebellum, of the annular protuberance, and of the medulla oblongata. This attempt at classification was necessarily deficient, for it is based upon an error in regard to the

origin of the nerves; the actual place of origin being confounded with that at which they issue immediately from the general mass." p. 71.

The remainder of the third section is devoted to describing the origins of the cranial nerves, and the quadrigeminal bodies; and is one of the most valuable parts of the book; but we are restricted to limits, that compel us to pass over a part which cannot be epitomized.

Section fourth, on the best method of dissecting the brain, extends through eleven pages. A large portion of these is devoted to asserting the claim of Dr. Gall and himself to originality in the mode of conducting this dissection. The author may be said rather to have given us the general principles for conducting the operation, than those precise and clear directions which the student requires. He says, "Our physiological views do not, it must be evident, allow us to go on cutting the brain into slices; this procedure, indeed, ought rather to be entitled a destruction, than an anatomical demonstration of the cerebral structure; it is precisely as though one should pretend to dissect a leg, or an arm, by slicing down these members transversely, or to show the structure of the thoracic or abdominal viscera, by treating the trunk in a similar manner, and giving names to the appearances exposed after each successive slice. We commence our dissection at the place where the proper cerebral masses are added to the nervous parts already described; we trace them in their continuations, and in their connexions mutually, and with the nerves of the five senses and of voluntary motion; in short, we proceed in the dissection of the brain in a manner precisely analogous to that which is followed in the anatomical demonstration of the other parts of the body.

"On account of their extremely delicate organization, the structure of several cerebral parts may be more easily and clearly exposed by means of scraping, than by cutting. This is the reason why I frequently prefer the handle to the blade of the scalpel, for removing parts that cover those whose course I would show; for instance, the passage of the pyramidal bodies across the annular protuberance—the continuation of the anterior commissure through the striated bodies into the middle lobes of the brain, and of the anterior pillars of the fornix, onwards to the mamillary bodies and interior of the thalimi.

"The brain should be removed from the cranium, care being taken not to tear the crura at the superior edge of the annular protuberance, (an accident that is very apt to occur,)

nor to injure the medulla oblongata at the lower edge of the same part, and to cut the spinal mass so low down as to obtain, besides the entire medulla oblongata, the upper part of the spinal cord. The brain, thus freed from the skull, is then to be put into a plate, with the basis uppermost." pp. 103 and 4.

In section fifth, the author discusses, at considerable length, a proposition, which he considers to be of great importance, viz. *the brain is not a simple unit, but a collection of many peculiar instruments.* That we may understand what he means by the term brain, he says, "I separate the nervous mass of the spine and the cranial nerves from the brain, and confine this last appellation to the entire nervous mass, added to the nerves of the external senses and of voluntary motion." He considers the cerebellum to be the first cerebral apparatus, or peculiar instrument of the brain; and this is his organ of amativeness. There is some confusion in his use of the terms brain and cerebellum. They are sometimes used in contradistinction from each other; at other times the latter is considered as one of the organs, or peculiar instruments, of the former.

In "section sixth, of the brain," Dr. S. says, "I divide the functions of the brain into two classes, viz. affective and intellectual; and, in harmony with this physiological division, I recognise two kinds of cerebral parts. The anterior pyramidal bodies I consider the rudiments of such as belong to the intellectual operations; and the other bundles of the medulla oblongata (in man they consist of olivary and part of the restiform bodies,) which run across the annular protuberance, to communicate with many of the cerebral masses, as the roots of those that pertain to the affective manifestations." p. 145. He then proceeds to examine the course of these two systems, or bundles of parts; the decussation of the pyramidal bodies; the structure of the annular protuberance; the course and termination of the crura cerebra; the structure of the convolutions, and the possibility of unfolding them.

The three last sections of the work are not less valuable than those which we have just noticed in our cursory manner. But our limits do not allow us to prolong this article. The work is of a kind that cannot be advantageously epitomized or analyzed, and we are fully sensible of the liability of any such attempt to do injustice to the author. Although we cannot commend the work highly for its method or perspicuity, it deserves to be studied by every one who would understand the subject of which it treats.

ART. XII.—*A Treatise on those Diseases which are either directly or indirectly connected with Indigestion: comprising a Commentary on the Principal Ailments of Children.* By DAVID UWINS, M. D. p. 274. London. 1827.

PART I.

CHAP. 1. is occupied by preliminary remarks on the mischievous consequences of false theories in medicine. A subject well meriting the closest scrutiny of every practitioner of the healing art. After making some judicious remarks against nosology, as an abstract science, and the errors sometimes made in morbid anatomy from the want of correct knowledge of structure, when subjected to morbid alterations, our author concludes the chapter, by delineating the leading features of a good physician.

In CHAP. 2. a general description is given of the anatomy and physiology of the organs concerned in digestion.

CHAP. 3. In which is taken a cursory view of temperaments and their peculiarities, the modes of explaining the operation of medicines. Dr. U. very justly observes, in relation to scepticism, that there is ample testimony recorded in favour of medicine being the most useful of arts, with all its uncertainties and imperfections.

PART II.

CHAP. 1. Our author does not profess to give a full and systematic account of the diseases he treats of. His design being to generalize, without entering into the minutiæ of symptoms and treatment. In conformity to the plan hinted at in his preface, he endeavours to make his subject "so far popular as to be interesting to the man of general science."

A summary view is here taken of those infantile diseases which owe their origin to, or are associated with, imperfect digestion. In consequence of a morbid enlargement of the mesenteric glands, a due transmission of chyle is prevented, which gives rise to emaciation, dropsical effusion, palor, and coldness of surface; in fine, tabes-mesenterica is established. This state is, however, not unfrequently connected with or converted into cerebral disorder, especially when the nervous and lymphatic temperaments are combined. Our author goes on to explain the rationale of this state of things, which

can be traced to original derangement in the assimilating organs.

The treatment mainly depends on supporting the system with proper aliment; and, as there is general torpor, with vascular irritation, Dr. U. was led to employ the digitalis, which he states to have been attended with extraordinary efficacy. Under its influence, the quick, irritative pulse, is rendered slow, firm, and equable; the lymphatic torpor and swelled abdomen yield with the removal of the head affection.

In the employment of foxglove, Dr. U. does not wish to be considered as confining his treatment to its exhibition alone, or as viewing it as a specific, and applicable in all cases.

The liver, in mesenteric disorder, being almost constantly involved, calls for the milder preparations of mercury, as the hydrarg. cum creta, in the dose of 2 grs. every night, or every other night, for a child two years old, at the same time giving 1 or 2 drops of tr. digitalis, three times a day, gradually increasing the dose. In cases where the liver becomes hard and much enlarged, the dandelion, in the form of extract or infusion, is strongly recommended.

The following remarks in reference to the use of opiates in cerebral affections among children, we consider equally just and applicable to physicians on this side of the Atlantic.

"Here I may take occasion to say, that the judicious use of opium in children's complaints, even when the disordered actions shall have extended themselves to the brain, may often be productive of much and lasting good. I am afraid that,—from the known tendency of opiates injuriously to affect the head, and from a justifiable horror of having recourse to a deleterious material for the mere alleviation of temporary sufferings,—we have in regular practice slidden too far into an opposition against its administration. I admit that its employment demands much caution and prudence; but I am sure that, caution and prudence being employed, it may often, by arresting irritation, even become radically serviceable."

When the lymphatic form of constitution is combined with the sanguine, our author has found that gastric derangements will be productive of acute or phrenitic hydrocephalus, explained on the principle of "impeded circulation in one part, and consequent accumulation of blood in another." This form of hydrocephalus is divided into three stages; the first is the stage of excitement, and is marked by excessive irri-

tability, great intolerance of light and sound, torpor of bowels, flushed face, frequent and tense pulse; a noisy croupal kind of breathing is also a frequent attendant on brain irritation, especially when caused by difficult dentition. This stage continues for several days, and is followed by that of oppression, with a remarkably slow and sometimes intermittent pulse, profound coma and insensibility, which may exist some days longer, and is then succeeded by the third stage, in which there is a vast acceleration of pulse, attended with loud screamings and convulsions, dilated pupils, and strabismus, attended with an almost constant roll of the head from one side to the other.

The treatment consists, mainly, in the exhibition of active purgatives, such as jalap, elaterium, &c. After effusion has taken place, very little can be done; though much has been said in favour of mercurializing the system, more may be accomplished, in Dr. U.'s opinion, by the internal administration of tr. cantharides. The remaining sections of this chapter (which, by the by, constitute by far the most extensive portion of it) embrace a general view of the symptoms and treatment of convulsions, worms, cutaneous affections, whooping-cough, and croup, in reference to their dependencies and connexions with the stomach.

We forbear, at present, entering into its analysis, as it contains nothing novel in theory or practice; being a mere digest of what is already well known on those subjects.

Chap. 2. contains observations on pulmonary affections, as connected with gastric disorder, that appear at the period of puberty. Dyspeptic phthisis is, indeed, no uncommon variety, and it requires no very great effort to conceive the ready transition of irritation from the stomach to the lungs.

Our author's mode of reasoning, and general principles of treatment in these affections, may be more satisfactorily examined, by adverting to the text.

"Now, it would appear more than probable, that the kind of irritation which repeated disturbance of the digestive organs implies, occasions in the consumptively disposed such an action in the exhalent vessels of the lungs, as that they shall readily bring out from the blood the material of which the tubercle is formed; that repetition after repetition of this irritative action, at length, occasions the tubercle to become itself active, and thus to commence and extend a disorganizing process through the texture of the lungs: but, whatever may be the theory, the fact is established, that repeated disturbances of the stomach affect, both directly and

indirectly, the lungs; and that it is especially incumbent on us to caution against these disturbances, when we find by the constitutional character, and the respiratory showings, that absolute consumption only waits, to commence its ravages, the mandates of some exciting cause.

"But, when I recommend as a cardinal point attention to diet, under the circumstances of predisposition we are now supposing, let it be understood, that the modern notions of starvation are calculated, according to my belief, to prove destructive of the purpose for which they are instituted. I have actually seen irritation—not merely weakness, but absolute irritation—grow out of those restrictive regulations which are founded on the supposition, that while you refrain from food you must do well. "I pursued," says a correspondent of mine, "the twelve ounces a-day scheme, till you might have studied osteology through my skin, and shown me as a counterpart to the *anatomie vivante;* but at the very moment that I was congratulating myself on my perseverance and success, my eyes felt dim, and *blood gushed from my nostrils,* in as large a measure, and to as great an extent, as had happened to me while I was eating and drinking in the ordinary way." And it is but a little time since, that I was summoned to see a patient under this non-drinking and twelve-ounce a-day regimen, who not only was brought to the very door of death by this severe discipline, but who was actually starved into an irritative fever:—so very far from the right point do those theories lead, which go upon the supposition, that no mischief can be done to the frame, provided you avoid the evil of repletion. Even when inflammation is actually present, and it is found necessary to empty blood-vessels artificially, a diet of a supporting, not of course irritating, kind or quantity, will often be found expedient to preserve the impetus of vessels in that condition, which shall obviate the passive tendency, if I may so express it, to irritation, inflammation, and hæmorrhage."

The remainder of the chapter is taken up with judicious instructions, as preventive measures to guard against its invasions. Also the remedial treatment usually pursued in those cases.

Chap. 3. contains a sketch of those maladies that occur in more advanced life. In the case of asthma, our author adduces ample evidence of the close connexion and mutual dependencies of the respiratory and digestive functions in a state of health or disease. In confirmation of which, the experiments of Dr. Wilson Philip are referred to, wherein the

8th pair of nerves in two rabbits were divided. In one, respiration became hurried, the air cells distended with mucus to suffocation; and on examining the stomach, the food was found unaltered. The other animal being exposed to galvanic influence, lived and respired naturally, and when killed, digestion was found to have advanced as under ordinary circumstances.

"By these very curious experiments," says Dr. U., "the connexion is clearly established between respiration and digestion; and it is easy to follow up, in idea, the liability that each function must possess of being interfered with by the other, upon the principle of sympathetic influence; nay, in the present case, there is something more than sympathy—there is the actual engagement simultaneously of the same system of nerves in the performance of the two most important functions of the animal economy; and, therefore, the disturbance of one process cannot fail of bringing with it some measure of derangement in the other.

"Nothing need be added to show the great importance of taking stomach conditions into our estimates, when we are considering the pathology and peculiarities of difficult breathing —nothing need be added to convince the asthmatic of the urgent necessity, in his case especially, of attending to the state of the stomach, if he wishes to keep under or cure his disorder: cure, I say, for actual cures have been effected by proceeding upon the principle now inculcated; and Dr. Bree himself conquered, in his own person, an inveterate asthma by a patient perseverance in well doing, as it respected the management of digestive organs."

Our author next proceeds to point out the intimate association existing between affections of the heart and stomach, the difficulty of distinguishing between structural and functional derangement, and explains how death takes place suddenly in cardiac affections, from the connexion between the gastric, respiratory, and cardiac nerves, without inducing any organic alteration.

No one can doubt, who will reflect for a moment on the close affinity existing between the brain and stomach, that apoplexy may originate directly or indirectly, from gastric disorder.

We pass over the remaining sections of this chapter, which we have read attentively, and find it by no means unworthy of the talents and diligent research of the author.

Chap. 4. *Brief intimations on the exterior differences between sympathetic and other disorders.* This chapter is

what it purports to be, very short; but contains valuable observations in relation to the state of the pulse, countenance, skin, &c. as varying in sympathetic and organic diseases. And although our author is ready to concede to the French, the credit of inventing the stethoscope, still he thinks, and thinks correctly, that many of its boasted discoveries are due to other means.

Part III.

Chap. 1. In this chapter, the nature and properties of the gastric juice and chyle are discussed, with an attempt at the rationale of hunger and thirst, which sensations are referred to a particular condition of nervous energy.

In the gratification of the sensations to which we have just alluded, we should be regulated by the "*conscious sensation*" of the organ, in the language of Dr. Johnson, rather than any fixed amount of aliment and drink.

Chap. 2. treats of indigestion, its causes, and modes of prevention. Dr. U. expresses his dissent from Dr. W. Philip's division of the disease into three stages, and with Dr. Johnson opposes the idea of assuming pain in the epigastrium as an evidence of inflammation; observing further, that we are not accurately informed of its precise locality; and as an additional argument in favour of his views, adduces the comparative insusceptibility of this organ to take on inflammatory action.

We cannot view our author's position as altogether tenable, as regards his pathological intimations; we have heretofore expressed our fullest satisfaction, but it must be conceded, in all violent cases that have come under our notice, that inflammation of a low grade has been uniformly present; otherwise how explain the disorganization and change of structure that usually mark its protracted course.

Among the numerous causes of indigestion, we discover nothing novel.

Remedies for indigestion, are considered in the concluding chapter.

ART. XIII. *A Treatise on Clinical Medicine, being a compendious and systematic Introduction to Practice, as contained in the Memoranda of* I. R. BISCHOFF, M. D., Imperial Professor of Clinical Medicine, Physician to the General Hospital, and also to the Lying-in Hospital in Prague. (From the German, by JOSEPH COPE, M. D.) London, 1827. pp. 280.

THE work before us contains the history and treatment of one hundred and forty-eight cases, together with a variety of excellent practical remarks. The pathology and treatment adopted by Dr. Bischoff are those of the school of Vienna, which is perhaps the best in southern Europe. In consequence of "an often expressed wish that clinical teachers would give to the public a particular account of their effective practice," the author has been induced to give a description of the mode pursued in the Medical School for Surgeons. It contains the result of such observations and discoveries as have been made in this school during the years 1823-24, and details facts with truth and simplicity, as nature presented them in her morbid appearances.

In order that every subject might receive medical aid, notwithstanding the want of physicians in some part of the empire, the Austrian government has thought proper to establish schools on the practice of medicine for surgeons.

"This institution has now been formed in the University of Prague twelve years; and about five hundred surgeons, already spread over the kingdom of Bohemia, received therein their instruction.

"In the following treatise I have sought partly to present to my hearers a memorandum of the clinical cases of the present year, and also to render to the profession at large, in a short view, a public account of the the method of treatment used, according to the present state of medical science in this school."

The following plan is adopted in the clinical school, the excellence of which cannot be doubted.

"Every patient when admitted is made over to a student, as his ordinary, who then publicly, and in the presence of the professor, makes, with all possible exactness, that so essential examination of the patient, by which the following are made out in the most careful manner:—1st. The patient's habit of body, and an account of his previous maladies. 2d. The exciting causes. 3d. The commencement and course of the disease to that period. 4th. The symptoms of the disease at the time of admission. 5th. The remedies already applied, and their effects. After

this merely collective and simply historical procedure, we pass to the second and most important point, the determination of the disease or diagnosis. And this is deduced from the above data acquired in the following order; viz. the habit of the patient, the exciting causes, the course and symptoms of the disease, and which are hence called the diagnostic momenta. What the disease has in common with others allied to it, and how to be distinguished from those which resemble it, is then brought forward; the case under examination is compared with the reigning constitution, whether stationary, epidemic or endemic, and the connexion of the present symptoms with the preceding causes is investigated; from these the conclusion is drawn, as from cause to its effects, so as to determine the disease as to its nature, character, form, stage, and degree of acuteness, and by giving it a name to assign the place it holds in nosological systems. By the diagnosis we are led, with the aid of singly collected facts, to a general idea of the disease; and here the practical teacher follows a method the reverse of the pathologist, who first establishes the idea of the disease, and afterwards assigns the symptoms, causes, divisions, &c. By means of the diagnosis, the physician sees at once the previous, present, and future course (prognosis) of the disease. This last he endeavours to establish according to the probability, whether the disease will terminate in health, in another disease, or in death. The prognosis, when given in the vernacular tongue, requires very great caution, lest the patient's courage should be cast down by the detail of unfavourable symptoms; whence in many cases it must be omitted in the patient's presence, and reserved for another place.

"After the diagnosis is established, the third principal proposition follows, viz. the plan of treatment. This is grounded on the accuracy of the diagnosis, and on the indication thereon constructed, that is, on the determination of the changes which must take place in the patient's frame, from nature or art, to bring about the curative process; and as these changes are either effected by nature or by art, so their is a natural and an artificial cure.

"Our first object is to procure the removal, as far as possible, of the efficient causes; but this may be no longer in our power: diseases then require, with respect to their treatment, a two fold and very material distinction; some can only be favourably terminated by the powers of nature, and the body is thus restored to health. In others, nature yields in the conflict, or would by herself only produce an unfavourable issue. In the former, the object of treatment consists in not interrupting her course, but in keeping it as regular as possible; a quiet observant practice

must here be employed, which uses mild remedies adapted to the case, removes impediments, and exactly assigns the diet and regimen. But when the disease is not able of itself to finish desirably its course, then a more or less powerful interference of our art in the progress of the disease takes place. It would be unpardonable to act the mere observer where an urgent indication requires our interference; and it is the great problem of practical medicine to know in what cases nature is to be left to herself, and where she is to be assisted by art, and the manner of doing it.

"According to the determined indication, the appropriate remedies are adjusted as accurately as may be to the patient's constitution; they are ordered with all possible simplicity, and the diet is assigned with the greatest care. All that in this short review has been set down respecting the patient, is now put down by the ordinary in writing, and in the same order, with truth and clearness, and read out publicly on the following day, as the history of the disease or pathologic biography. During the course of the disease it becomes the duty of the ordinary, daily, before the professor's visit, to examine the patient, and to set down in writing the changes that may have taken place, and the general appearance of the disease. On the opening of the clinical school, these observations are read out, their truth confirmed, their errors corrected, and the whole amended.

"By this a two-fold object is attained:—1. The student himself learns to make observations. 2. A bar is put to making out the patient's case, after perhaps the lapse of some days, and often from an uncertain memory; by which occasion is given to such extraordinary and scarcely credible accounts of disease. In this manner the treatment is continued till its termination in a cure or death. In the last case the post mortem examination takes place; previous to which, in reference to the disease, the morbid appearances most likely to present themselves are stated. During the examination, these are noticed with the greatest attention, and consigned to writing. The whole is now compared with the history of the disease and the previous diagnosis; the account of the examination is again publicly read on the following day; the true or mistaken judgment exposed, and the practical results deducible from it, particularized."

"The objection (says the author) to my using so often the same remedies I consider ill founded, provided a perfect cure, the chief object, is attained; and our art is surely so much the more estimable when it attains its ends by few and simple remedies, especially in cases of difficulty and danger. The cases chosen for the clinical school were taken from the wards of the

Imperial General Hospital, into which (without including the house for insane persons, and that for lying-in women) upon an average there are admitted 1800 yearly, and in sickly seasons 2500. But in order that the other important and remarkable cases may serve to promote the good of the Institution, and the acquirement of knowledge, it is so arranged, that at certain times, as also when interesting cases occur, the students are conducted into the remaining wards, where the professor treats on any subject with the case best suiting it before him."

Among the cases selected, those were particularly chosen as examples for the treatment which represented the reigning epidemic, so that the clinical ward might be considered as a compendium of the then prevailing diseases.

Clinical Annuary for 1823.—We pass over the tables of diseases and of the weather to the consideration of the prevailing character of the diseases, the stationary characters of which were inflammatory this year. The prevalent diseases in the individual months were first in November and December, in which a damp, cold, and unsettled state of the weather prevailed, the mucous membranes were most affected. In November the last case of scarlet fever occurred. This epidemic began in December 1821, and extended itself from January to March 1822. In May it spread more widely, and began to be contagious, and continued so until November, attacking children and adults. It was rendered very malignant by the excessive heats of summer, and was finally extinguished by the intense cold of the winter. In February, when cold weather prevailed, acute rheumatism was most predominant. In March, a distinct tendency to the nervous character was observable, perhaps owing to the unsettled, moist state of the weather. The measles became general in the town, but could not be said to be malignant. April was characterized by the sudden appearance of the contagious typhus (typhus carceralis) in the General Hospital. It arose in the prisons of the new town, whence the cases were brought into the hospital. It is worthy of remark in a practical point of view, that on the 2nd of April, the crowding of the prisons with an unusual number of culprits occurred, and that already on the 4th, patients were brought into the hospital attacked with fever, stupor, dull countenance, blood shot eyes and catarrhal symptoms, and the peculiar typhus exanthema, which last was a characteristic mark in all of them, and bore at first a great resemblance to measles, the then existing epidemic. The characteristic was decidedly inflammatory, though modified. Its extension was arrested by separating the sick, and employing fumigations with mineral acids. May was of a moderate temperature—a frequent change of weather

favouring the appearance of acute rheumatism. June, unusually cool and rainy, to which are imputed the frequent catarrhs, inflammations of the throat, coughs, inflammations of the lungs and pleura, and especially the numerous diarrhœas and intermittents, which till now were so rare, again frequently occurred. More were treated in this than in the preceding ten years. In July, the heat began to be oppressive, and affections of the digestive system were most conspicuous; gastric fevers and those of the bilious type often appeared, passing very readily into the nervous and putrid kind. The dysentery, heretofore a rare disease, now presented itself: a few this month were brought in with it. The gastric bilious character became still more developed in the month of August, and was favoured by the hot weather which then prevailed.

We come now to the individual cases.

Treatment of particular Cases.—We pass over some useful though not novel observations on synocha, as also an enumeration of its characteristic symptoms. We must, however, pause to notice some curious speculations in relation to the *redoubled pulse*, which we shall present to the reader.

"When in synocha there is the double or pulsus dicrotus, we may expect for the most part a favourable hæmorrhage from the nose.

"Hippocrates, who was not acquainted with this kind of pulse, calls our attention to this very crisis from other attending circumstances. He says, (Epid. lib. 1, sect. ii. 18.) 'in those who in acute fevers, but especially in ardent fevers, shed spontaneous tears, we are to expect hæmorrhage from the nose, if they are not dangerously affected.' Also, (Lib. Prænotionem. ab Initio.) 'we should inquire of the patients, (who having fever, perceive a hard painful swelling under the short ribs,) whether they have pain in the head, or are dim sighted, in which case it is probable they will bleed from the nose; we are particularly to expect such an hæmorrhagy in young men who have not passed their thirty-fifth year.' And further, in the same book, 'in those who in these fevers are thus affected with pain in the head, with dimness or weakness of sight, or who see sparks of fire; who, instead of the heartburn, perceive in the hypochondria of either side, a contraction or pain, without inflammation, we are to expect a hæmorrhage from the nose, rather than a vomiting.' Solanus de Luque, and Jacob Nihell (Novæ observationes circa crisium prædictionem ex pulsu. Traject. ad. Rhen. 1753), have endeavoured to establish by remarkable observations, and rules founded upon them, the doctrine of prediction of crisis from the pulse. According to Solanus, the double beating pulse is a cer-

toin sign of a critical hæmorrhage from the nose, viz., according to the intervals, (in which it appears) it becomes a determined sign of the time when hæmorrhage will take place.

"He says, 'when the redoubled pulse happens at every thirtieth pulsation, the hæmorrhage will take place within four days; if at every sixteenth stroke, within three days; if at the eighth pulsation, within two days; if at every third or fifth stroke, within twenty-four hours; the shorter the interval of the redoubled pulsation, the sooner will the hæmorrhage take place.

"'If in the double stroke the second wave is stronger than the first, the hæmorrhage will be abundant; if both strokes are alike, it will be moderate, if the second is weaker, it will be sparing.' To establish the truth of these propositions, cases, and the testimony of eleven Spanish physicians, are adduced. Nihell observed the redoubled pulse in 121 men, and in seven only did the nasal hæmorrhage not take place. We may hence conclude, that in the southern climate of Spain, fevers in respect to arterial action, observe an evidently different course from that in our own; for in our part of the world the redoubled pulse is much less common; (for the most part indeed, a prelude to nasal hæmorrhage) but by no means according to the above adopted laws; and the most experienced practitioners scarcely would, in a long career, have seen one half of the number stated."

Febris Inflammatoria Protracta.—A priest of strong bodily habit was seized with violent shivering, succeeding heat, violent pain in the head; cause unknown; depression of strength, and restlessness. On the 31st of January, the fourth day of his illness, entered the hospital. Countenance flushed, eyes sparkling and animated, tongue coated in the middle with a dark brown crust, appetite gone, thirst excessive, breathing natural, pain in the spine; urine clear and high coloured; costiveness; skin hot; pulse frequent, full, tense, not hard. The following was prescribed:—Rad alth. ℥ss.; coq. s. q. aq. per ¼ hor. col. ℥viij. ad pot. nit. ʒss. syr. alth. ℥ss. sumat. coch. duo. secundâ quâque horā;* crude barley, boiled with liquorice root, and an emollient glyster was ordered. The remedies were continued until the seventh day of the disease, when a crisis was anticipated; yet the urine remaind crude and the fever continued. In the night several loose stools; no relief. Nitre was discontinued. On the ninth day a copious yellow-red sediment formed in the urine; pulse undulating—somewhat frequent—evening a general perspiration occurred—head-ach disappeared, but a dry

* This direction is to be considered as general when no other is particularized.

cough had come on. To the other remedies an emollient linctus formed of muc. acac. et syn. comm. was added, and he drank decoc. salep. Costiveness returned—pot. tart. ʒij. were added to the decoc. marshmallows—used this till the twelfth day; and on the 10th February left the clinical ward cured.

Another case, with symptoms so similar as not to need repetition, occurred in a turf-digger. He was treated thus:—ordered aq. comm. ℥vj.; pot. supertart. ʒij.; test. pp. ʒi; sacch. pur. ʒij.; (enema emolliens). On the 22d March, anticipated hemorrhage from the nose occurred moderately; it returned on the 24th—head now free—the countenance less flushed—pulse more quiet—continued the mixture for some days uninterruptedly. Moderate evacuations, sediment in the urine, and moderate perspiration occurred. The pulse became soft—urine by degrees of a straw colour.

The fifteenth day of the disease arrived: the patient had no complaint except his digestive functions were impaired—for which was ordered rad. caryophyllat. ʒiij.; inf. s. q. aq. fervent. p. ℥ hor. col. ℥vj.; adde ext cent. min ʒss. After taking of this, his appetite increased so as soon to become absolute hunger. Went home 27th March cured.

A third case is narrated—having nothing peculiar, excepting that the menses ceased in her 25th year, without any assignable cause, and so continued for a whole year without any inconvenience on that account. They returned in her 26th year spontaneously, and observed their regular periods. In her 28th year suppression again took place from a cold, and the inflammatory fever was the result, which was treated much as the other two, with the addition of a blister to the back of the neck on account of the disordered state of the head.

Catarrhal Fever.—"Every pulmonary catarrh should be carefully attended to, and we should not hold light any one that has been neglected," is a maxim that should not be overlooked. Moderate temperature; abstinence from stimulus in food or drink; quiet; mucilaginous, soothing remedies and vapours are indispensable in simple catarrh. Old catarrhs require, if there is any inflammatory tendency, rather emollient remedies and small repeated venesections, with revulsive applications; and they must, while the cough lasts, be treated with great circumspection and perseverance.

The case before us passed into the nervous state: it occurred in a young woman 15 years of age. She was seized with cough and fever, and on the thirteenth day of her disease, when she came into the Clinical Hospital, she complained of violent pain in the forehead—countenance flushed, eyes protruding, nose and

mouth dry, tongue white, thirst great—sense of tickling in the throat; constant irritation and dry cough; voice hoarse; breath-difficult; bowels free; pulse full, tense, and rather hard.

Ordered, *four* leeches to the breast and emollient fomentations. Dec. rad. alth. ℥viij.; ammon. muriat. gr. xij.; roob. sambuci. ℥ss.

The breathing was relieved after using the leeches—headache less violent; mouth and tongue remained dry; thirst great; a yellow expectoration occurred; urine yellow; with mucous sediment, &c.; pulse moderately frequent and soft. 17th day.—The evening exacerbation was ushered in with increased headache and wandering stitches in the breast—a blister applied between the shoulders. 18th day.—Many loose stools, cough moderate, inspiration somewhat confined, wandering pains in the chest, cough not excited by deep inspiration, urine of a reddish colour with floating clouds, pulse quick, full and soft—had a blister on the breast, and night and morning one-sixth gr. of ipecac. 19th day.—A sense of burning in the stomach and œsophagus, which was relieved by raising a large round worm—evening more fever—had a stool resembling boiled meal. Ordered mist. amygd. cum pot. nit.—next day better. 21st day.—At night continued wandering—headache milder, face pale with circumscribed flush on the cheeks, cough continued with yellow expectoration, skin dry and hot, urine turbid, sediment considerable with a vitreous surface, pulse equal, moderately strong and soft.

The critical urine on the 21st day was unattended with critical perspiration and the delirium now occuring threatened the approach of the nervous stage, with inflammatory irritation of the brain; four leeches ordered to the breast, and dec. alth. cum. ammon. mur. repeated. No delirium in the day; it recurred at night with heaviness of the head, two leeches to the temple at bed time; 22d day, refreshing sleep followed, and all the symptoms gradually abated, and she was discharged cured.

Rheumatic Fever.—Rheumatic affections are endemic in Prague, owing to the hilly situation of the city and the easy access of the north and northwest and southwest winds, together with the great changes in the weather and the constant currents of air. Servants are most affected from their greater exposure, &c.

The fever in rheumatism is always at the beginning, if not an inflammatory one, at least a state of irritation. When the fever is inflammatory, the treatment should be antiphlogistic and this will alone promote diaphoresis; diaphoretics, at the beginning, make the case worse.

If patient is plethoric and strong, fever violent, pulse full, tense and hard, blood letting is indicated. And in this case, a thick inflammatory crust covers the blood.

But if the local affection be most conspicuous, then cupping and leeches are advisable, lukewarm mild infusions, nitre in small doses, roob and syrup of elder are beneficial. If there be a gastric affection connected with it, then mur. of ammon. or liq. antim. tart. may be used, and only when the fever abates, can we give liq. amm. acet. flor samb. stipit. dulcamaræ, aconitum, sulphur. ant. præcip. Guiacum and camphor are only useful in chronic rheumatisms without fever. It often happened that the rheumatic humour fixes itself in some place, and there obstinately continued; when all fever and inflammatory irritation were removed, blisters were employed, and they generally removed the pains. Externally, rheumatisms do not bear warm moisture; folds of tow, flannel, and sear cloth must be used. It is only when absolute inflammation exists with them, that emollient fomentations or vapours are serviceable, and here they procure great relief.

We select the following cases to illustrate Dr. B's mode of practice.

"On the 22d of November, there came into the clinical ward a servant-maid, nineteen years old, who had already been several days ill at home, she had violent headache, wandering pungent pains in the shoulders, a bitter taste, frequent and tolerably strong pulse, she had a strong and dry cough, but she could make a deep inspiration without pain. She took mist. amyg. cum pot. nit. and sacch. She perspired greatly, and the bowels became costive, whence dec. gram.* cum pot. tart. was given. The urine deposited a copious sediment, and a corresponding evacuation was procured by glysters. Up to the 28th, the patient was quite free from all pain, and left the hospital on the 30th of November."

"Febris rheumatica in intermittentem transiens. —Eva Kauba, a maid-servant, twenty six years old, of a stout make, exposed herself while employed in washing to the cold, and was seized with wandering violent pains over the whole body; she had a sense of oppression on the breast, with a constant inclination to cough, the respiration itself was not much impeded; she was admitted on the 28th of December, with these symptoms; the pulse was frequent and full, but soft: dec. alth. cum nitro, and a blister to the sternum. Already, on the following day oppression was less, but the fever continued somewhat violent. On the 2d of January, the patient complained of

* The root of the Triticum repens.

colic pains in the belly; it was the time of her menstrual period; the nitre was omitted, and in its stead potass. tartras added. She took some chamomile tea, and had warm cloths applied to the abdomen, by which the pains were immediately relieved. On the 4th of January, towards evening, she experienced very great cold, to which heat and a general perspiration succeeded; these paroxysms returned daily at the same hour; the pains, however, had entirely ceased; infus. caryophyllat. cum ammon. muriat. was ordered; and after she had taken it eight days, the febrile paroxysms disappeared. On the 14th, she found herself well, and without any remains of her complaint; she went home on the 18th of January."

Four cases of rheumatic fever of various forms next follow, presenting nothing of interest.

"FEBRIS RHEUMATICA CUM PLEURITIDE.—The following case shows what very dangerous forms acute rheumatism sometimes assumes, when it attacks an inward part:—A tailor's wife, forty-nine years of age, and lax habit of body, was after a very violent emotion of the mind attacked with cold and heat, to which were soon joined very sharp pains in the limbs, and along the back; these were milder on the third day, but now wandering pungent pains attacked the breast, which rendered breathing very difficult, and were quite intolerable when she coughed or made a deep inspiration; the head was painful, the countenance pale, the skin moderately warm, the pulse frequent, somewhat hard, very contracted and small; in this state she came on the 5th day into the hospital. Venesection to eight ounces was employed, (the blood formed a thick cupped crust) also emollient fomentations to the breast, glysters and dec. alth. cum nitro and syr. altheæ. The venesection was on the following day repeated, as the violence of the symptoms continued. On the third day six leeches were applied to the part where the greatest pain was felt. On the fourth day a decidedly bilious state came on, the conjunctiva and the skin of the face were remarkably yellow, the tongue was covered with a thick yellow slime, the taste was pasty, the headache increased, particularly affecting the forehead; the patient, moreover, complained of a heavy pain in the right hypochondrium, which did not bear pressure, and appeared somewhat swollen; the pains in the breast had disappeared; ordered, dec. graminis. cum potass. tart. ʒij; emollient fomentations were applied to the pained parts, together with six large leeches, which were repeated on the following day. The fever did not admit of venesection. The pain in the region of the liver was soon dissipated, but now the patient began to complain of violent headaches, they were insupportable at night, she would

not remain in bed, she found no where rest, and had even pains on applying the hand to the scalp, yet she bore the impression of the light without inconvenience; the pulse was very frequent, hard and oppressed; blood was taken to six ounces. Leeches applied to the temples, and a powder containing half a grain of calomel given every three hours. On the following day she was something better; towards evening the pains of the head increased, and six leeches and a blister were applied to the neck. As frequent loose evacuations by stool had come on, a thick decoction of salep, with ammoniæ mur. gr. xij. was exhibited, and one-third of a grain of ipecacuanha, added to the calomel. Her state was after this more tolerable, yet she began to cough with more violence, had oppression at the chest, could not on account of a pain there lie on the left side; expectorated a tenacious, saffron-coloured mucus, the tongue was covered with a thick slimy coat, the pulse still remained quick, full and hard; venesection to ℥vj. was again employed, the blood was covered with an inflammatory crust; the urine continued still high coloured, and troubled. The oppression at the chest abated, the pain continued, six leeches twice applied, and a large blistering plaster entirely removed the pain. Meanwhile she returned to the decoct. alth cum nitro, and calomel was given, combined with digitalis. On the 22d day the urine deposited for the first time a dirty white mucous sediment, the skin till now dry, began to perspire freely, so that she was bathed day and night in sweat. After this complete crisis by sweat and urine, no untoward circumstance occurred, to disturb her now pretty rapid recovery."

Gastric Fevers.—Eight cases of this description were treated, and this state was frequently seen connected with other complaints. In the hot summer months this complication was frequent, and declared itself decidedly bilious. For the most part, the patients were in an advanced stage of the disease when they entered the ward, and hence there was seldem occasion for emetics. Mild solvent eccoprotic remedies had always the best effects. If diarrhœa was present, muriate of ammonia was employed in small doses, and ipecacuanha as circumstances required. The nervous or putrid state often occurred from previous neglect, and the patient was in imminent danger. This state was opposed by the arnica root, which in such cases, especially when the diarrhœa still continued, had an excellent effect, with caryophyllat, ipecacuanha, muriate of ammon. in small doses and columbo. If the vital powers sank, strong restorative means were employed as angelica, cinnamon, cascarilla, camphor with external irritation according to the indication. The following are given in illustration.

"Febris Saburralis.—A hatter, thirty-two years old, had many years ago, an obstinate intermittent fever; on the last day of January, 1823, he eat some fat meat, after which he passed a restless night; he felt on going to bed a sensation of cold, which became a slight shivering; he had headache, unusual pressure at the præcordia, and loathing of food. On the third day of the disease, he came into the hospital, the taste was bitter, with eructation, as after eating unsound eggs, the tongue coated, he had colic pains, the belly was swollen and pasty to the feel; he had had too loose stools, the urine was turbid, he complained of great depression, the pulse was frequent, full and soft; he had ordered dec. gram. ℥viij. sod. sulph. mellaginis graminis ā ℥ss. On the following day three very fœtid evacuations took place; in other respects the symptoms were the same though not so violent. No alteration was made in the treatment, copious evacuations followed daily, the abdomen subsided, the headache as well as the oppression at the stomach disappeared, the urine deposited an argillaceous sediment, the taste became natural, yet the appetite was deficient. Bitters were now had recourse to, and the following prescribed.—R. calam. arom. ʒiij. f. inf. ferv; colat. ℥viij. adde ext. marrub; alb. ʒss. spt. æther. nitrici ʒj. For three days the patient used this remedy and was much better; the appetite returned, the stools were regular, and after being eight days in the hospital, he went away perfectly well to his occupations."

"Febris inflammatoria gastrica cum angina tonsillari.—Gottfried Grohmann, a student, eighteen years of age, felt himself, on the 5th of July, without being able to assign a cause, uncommonly cast down and stupified; he had headache, frequently on a sudden he became faint, with alternate heat and cold; pain and difficulty in swallowing came on with restlessness. In this state he was on the second day of his illness brought into the hospital. His countenance animated, flushed, the eyes glistning, the taste slimy, the tongue had a thick white coat, the appetite gone, the mouth inflamed, and the tonsils considerably swollen. In the region of the stomach he had a sensation of a dull pain, it was sensible to the touch, the abdomen tense, he had had a stool, the urine was of a dark colour, the heat of the skin increased, the pulse frequent and strong. The treatment consisted in the employment of four leeches to the neck. Decoct. graminis cum potass tart. and mellag. gram. together with an emollient gargle and fomentation.

"On the 9th, the inflammation in the throat had greatly subsided, the fever was moderate, and the gastric symptoms less urgent. Instead of the potassæ tartras, the pot. supertart. was

added to the decoction; and as he had had no relief for two days, glysters were employed. The evacuation was scanty and hard, hence dec. gram. cum sodæ sulph. and ext. gram. was ordered, from which some easy evacuations took place; the morbid appearances gradually disappeared.

"On the 14th, the eighth day of his being in the hospital, he left it recovered."

"FEBRIS GASTRICA SABURRALIS, DEINDE NERVOSA PUTRIDA, CUM INTUSSUSCEPTIONE INTESTINORUM.—The case of Anthony Sidel, a student in surgery, had an unfortunate issue, and the post mortem examination was interesting. This young man, by errors in diet, had brought on a gastric fever; he used at his own suggestion the vitrum antimoniale, which passed downwards and brought on a violent diarrhœa, so as to cause ten or fifteen evacuations daily; three entire weeks elapsed in this state; at length he came to us with the appearance of a nervous putrid fever; the head much affected with stupor, ringing in the ears, and deafness; his countenance was pale, the eyes sunk, the tongue dry and covered with a brown crust, tremulous, and with difficulty brought forward; the speech heavy, the abdomen not painful, collapsed, the diarrhœa still continued, and at last the stools came away spontaneously; the skin was dry to the feel, the pulse weak. For this state the restorative method was employed; but the chief object was to put a stop to the excessive diarrhœa; hence, rad. arnicæ, angelica. aq. cinnamom. united to mucilaginous remedies, particularly to the mucilago acaciæ, salep, rasur. cornu cervi; with red wine; ipecacuanha in small doses, and taken when the powers began to sink, camphor, liq. ammon. subc. castoreum and moschus, were had recourse to; the patient however died in the third week after his admission. On opening the body, contrary to all expectation were found (what most rarely occurs in examinations after death,) no less than seven intussusceptions, all which were from above downwards, and each of them occupying half a foot of intestine; the bowels were moreover quite empty, the upper intruded parts of the gut were much inflamed and red, and were with some difficulty drawn out." How are we to form a correct diagnosis in such cases?

While on the subject of intussusception, the following case is narrated by the author, it was admitted into the hospital, the same week with the foregoing.

"HYDROCEPHALUS ACUTUS CUM INTUSSUSCEPTIONE INTESTINORUM.—A boy, ætat. 14, whose employment was to play on a wind instrument, was admitted the ninth day of his illness, with delirium, stupor, dilated pupil and strabismus. Had

also an inflammatory affection of the intestines; complained of fixed pain in the belly opposite the lumbar vertebræ, and he contracted the facial muscles, indicating pain, when pressure was made in the umbelical region; bowels confined; frequent vomiting which did not at once follow the taking of medicine; he had much fever. This case was deemed inflammatory dropsy of the head, accompanied with enteritis: topical bleeding; emollients, calomel, &c. were used: the issue was fatal. *Sectio Cadaveris.* On exposing the parietes of the ventricles of the brain, the contained water protruded them like a pouch upwards; they were filled with lymph. Vessels on the surface of the brain and its membranes very much developed. *Thorax* in a natural state. *Abdomen.* For a long time no unhealthy appearance was discernable, till on separating them, an intussusception was observed in the small intestines, at least *two feet long;* the inferior portion was thrust into the upper, and was here inflamed.

Bilious fever happens frequently in Prague, especially in the hot seasons; are readily distinguished by the yellow tinge of the skin, by a similar covering and roughness of the tongue, bitter taste, great thirst, vomiting or eructation of a yellow, green, or black bile, tension and oppression about the liver, dark, red or deep saffron coloured urine, which gives a yellow stain to linen, copious bilious stools, and sour smell of the perspiration. In most of the cases in our time, there is very considerable irritation or even absolute inflammation; this should be particularly regarded in the treatment, and hence emetics are less frequently indicated than formerly; the prevailing type of diseases is now-a-days more of an inflammatory nature. This would be increased by vomits and the affection of the liver artificially changed to absolute inflammation of that organ.

The best effects result from the use of antiphlogistic opening, and acid remedies. as. gramen. tamarinds. potass. supertart. vel. tartras; lemonade, vinegar and water, oxymel and acid fruits.

Should the inflammatory affection gain ground, with an apparent determination of blood to any particular organ, topical bleeding is requisite. Bleeding from the system should be resorted to only when the inflammation has attained a high degree, and even then with great caution. As by its indiscreet use, the disease may pass easily into the typhoid state. The following may serve to show the practice in this disorder.

"Febris Biliosa et Amenorrhœa.—Anna Eberle, a servant-maid, of a lively character, nineteen years old, came, on the 24th of June, into the hospital, after having, by putting herself into a violent passion, and taking much cold drink, brought

on fever three days before. She complained of an oppressive pain in the forehead, her face was hot, with a red circumscribed flush on the cheeks, having somewhat of a yellow tint, the eyes glittering, the tongue covered in the middle with a whitish yellow coat, the taste bitter, as also the eructation; great thirst, fulness and pain in the region of the stomach; she had a stool daily, but it was trifling; the urine was of a greenish black colour, the skin burning hot, dry, the pulse quick, tense, and rather hard; the catamenia had not appeared for three months; for this she could not assign a reason. Dec. graminis. cum pot. tart.

"On the 26th (the fifth day of her illness), the symptoms continued the same, the urine black-red, turbid, with an abundant sediment, the colour of chocolate. This sediment was nothing but coagulated blood, which was vicariously secreted by the kidneys, and seemed to supply the place of the menses. She had no pain in making water. Rad. gram.; fruct. tamarind. enucleat. āā ℥j. f. decoct. colat. ℥viij. adde potass. tart. ʒj. syr. rubi. ʒss.

"On the 28th, she complained of increased headache; moreover, she could not bear the light, from the great sensibility of her eyes; the eructation was constant. Ordered four leeches to the temples, which were repeated at night, and a blister to the neck; test. præp. ʒj was added to the mixture.

"On the 29th, a general improvement took place, the catamenia had made their appearance, and from this time the dark coloured sediment in the urine ceased. On account of the still remaining headache, four cupping-glasses, with scarification, were applied between the shoulders, and sinapisms applied to the calves of the legs, a diminution of it ensued, but it returned on the 3d of July, accompanied with shooting pains in the ears, for which four leeches were applied behind them. On the 4th the symptoms had notably diminished, the head was more free, the tongue cleaner, the taste natural, the urine deposited a mucous sediment, and had the natural straw coloured appearance. Ordered dec. gramin. ℥viij. pot. tartrat. ʒij.; but as frequent loose stools followed, fifteen grains of muriate of ammonia were substituted for the tartrate of potash. On the 7th, general improvement; the appetite returned, and a natural evacuation by stool took place; she had ordered, dec. tarax. simp. On the 10th she took, in order to stimulate the languid digestion, summit. centaur. min. ʒij. f. inf. ferv. col. ℥vj. adde sp. nitr. dulc. ʒj. On the 16th she returned cured to her service."

"Febris Pituitosa.—Fevers of this type happened less frequently, and always showed a slow and tedious course; with regard to their treatment, the attending faintness and apparent de-

bility deterred one from a stimulating mode of practice, and yet on the other hand forbade, by the too long continued use of evacuating remedies, reducing still more the patient's strength; the chief remedies in such fevers are potass. sulph.; ammoniæ murias; antim. tart. in small doses. ipecac. rhubarb and especially flowers of arnica, afterwards senega, bitter and tonic remedies. Should there be at first an indication for emetics, they produce the most benefit, yet for the greatest part, some preparatory course is necessary.

"John Schröder, a locksmith's journeyman, twenty-three years old, of a moderately strong habit of body, lost, without a known cause, his appetite, had a stupifying headache, principally in the forehead; felt himself weak and depressed, had frequent shivering, after which an inclination to vomit; a week passed thus, when on the 8th of February he came into the hospital. The headache continued, the countenance was pale, the look melancholy; the tongue covered with a dirty white tough slime, the appetite quite gone, the deglutition somewhat impeded, the uvula relaxed, the thorax free, the bowels loose, having a daily evacuation, the urine pale red, the pulse moderately frequent and soft. Dec. tarax. cum ammon. mur. and an emollient gargle of infus. flor. samb. et malvæ. fol. cum mell. ros. On the 12th he had many thin loose stools, and the strength diminished remarkably. He took infus. rad. arnicæ cum ammoniæ mur. gr. xv.; and as the affection of the head continued, sinapisms were applied to the calves of the legs; the diarrhœa and the general state of the patient became worse; there was blood in the stools, and he was sometimes near fainting; the abdomen was tense. R. rad. arnicæ ʒij. f. inf. ferv. col. ℥viij. adde mucilag acac. syr. papav. āā ℥ss. R. pulv. rad. ipecac. gr. ij. sacch. alb. ʒj. f. pulv. divide in doses vj. Sumat unum tertiâ quâque horâ.

"On the 14th, the affection of the throat was still the same, he also complained of oppression at the chest, the diarrhœa had diminished, and no more blood came away: ordered four cupping-glasses, with scarification, to the sternum, and a blister to the neck. R. rad. arnic. stipit dulcamar. āā ʒij. f. inf. fervid. colat. ℥viij. adde oxym. simp. ℥ss. Feb. 16th. The deglutition is easier; there is still oppression of the chest; three more cupping-glasses were applied to it; he was better; there was a copious perspiration; the appetite returned, the pulse was freer, and the tongue clean.

"On the 2d of March he complained of want of sleep, headache, nausea, and loss of appetite, and the tongue became white. He acknowledged that he had eaten too much, having been allowed meat. Inf. arnic. cum ammoniæ muriat. was given; and

after he had used this some days, he took the following: R. inf. sem. fænic. ex ʒij. parat. ℥viij. tinc. rhei aquos ℥ss.; and afterwards, inf. rad. caryophyllat. He did not, however, recover his strength; the head was still affected, and all appetite lost; the tongue white, the pulse weak. R flor. arnic. ʒij. inf. ferv. ℥viij. adde syr. alth. ℥ss. To this was afterwards added ext. card. benedict. a blister was applied; and after this, inf. cal. arom. cum sp. nitr. dulc. It required a long time before the functions were restored to their natural state. Nature, in this case, seemed to conduce nothing; and except an occasional diaphoresis, no critical symptoms were noticed. It was not till the 24th of March that he was cured, and left the hospital."

Nervous Fevers.—Five cases were admitted in which this type was already established; but it also accompanied a greater number of other affections. Gastric and inflammatory diseases often passed into the nervous state. This caused such complications as were very difficult of cure, and the treatment required, was often at variance with the preceding symptoms. It often happened that the fever had assumed the nervous type, while the local affection still seemed to demand antiphlogistic measures. "Nay, even genuine nervous fevers sometimes had such violent exacerbations that during the paroxysm it was necessary to discontinue even the mildest restorative, and resort to refrigerants or sedatives. He who does not keep his eye fixed on this real contest between the vascular and nervous systems, who, without making allowance, uses only stimulants in nervous fevers, will doubtless do mischief; he disturbs the efforts of nature, which endeavours on many occasions to relieve herself. It is then that the physician should be only a prudent observer; should remove obstacles, and guide the disease in its course, but not pervert it; above all, we must consider whether or not an inflammatory state of the brain, or an insidious inflammation of the intestines may not modify the case. There is, for example, an insidious and obscure inflammation of the intestines, which very often attends the nervous and putrid type of fevers; and as these patients commonly lie overcome with stupor and delirium, it is difficult to make it out; and it is only by a rough handling of the belly, particularly in the hypogastric region, that the patient will sometimes give signs of pain by groaning, or contracting the muscles of the face. Distention of the belly and frequent purging, are usually present. Should the abdomen be very tense, the examination of it will unfortunately afford us no information; very seldom, and only when the inflammation reaches the upper part of the small intestines, have we that otherwise weighty and decisive symptom of vomiting."

On post mortem examination of those who have died of nervous fevers, though the omentum and entire surface of the intestines are to appearance in a natural state, yet we find by carefully untwisting the intestinal canal, there appear commonly in the small intestines, but especially in the ileum, where it lies, in the pelvis near the spine, dark red inflamed spots, becoming more frequent as you proceed and a general inflammation of this intestine for the most part near the cœcum, and this sometimes for the space of several feet. The outer coat is usually deep red, inclining to black, and has often on its surface large spots of a membranous, putrid matter; and when cut through the mucous membrane appears moderately red, or sometimes quite a dark red, and full of ulcers exuding a bloody ichor. We must not from this infer that nervous fevers in general consist in an obscure inflammation of the intestines; for certainly in the greater number the belly is free from pain—there is no distention—stool either natural or moderate diarrhœa, and the disease terminates favourably with gentle stimulating remedies, which could not occur if a baneful inflammation was present in all of them. Moreover, many who perish of nervous fever show no morbid alteration of the intestines whatever.

If this is practically considered we shall find that nervous fevers in general are but the termination of previous inflammatory or gastric fevers: if the gastric character is overlooked or left to itself, treated too roughly or with heating remedies, the existing irritation of the intestines is readily urged to inflammation, which, from the protracted course of the disease, has time to form gradually, and hence does not display itself with sudden violence; and from the sympathy existing between the brain and intestines the functions of that organ are deranged.

Why the ileum should become the seat of this insidious inflammation cannot be explained on the known laws of physiology or pathology. "One can scarcely doubt," says Dr. B., "that an oppressed sthenic state, and no real want of power is at the bottom in nervous fever, notwithstanding the appearances taken together are nervous; nor can any one object but that there may be equally an oppressed state of the nervous, as well as of the vascular system. The expressions *nervous state* and *weakness* are hence any thing but synonymous; there is a nervous state, with sufficient, and also with oppressed energy; so on the contrary, a great degree of real debility may exist without any nervous symptoms being present. Experience teaches, that when, by a practice more observant than active, nervous fevers are brought to the period of a regular crisis, this passed, the powers of life develop themselves again spontaneously. He who in

that case gives stimulating remedies will increase the delirium, or even bring on inflammation of the brain, and if, deceived by the sinking strength, he pursues that course, the patient will die apoplectic, or exhausted from excessive irritation. There is seldom any real want of strength in the beginning of nervous fever; nature makes every effort to overcome the stimulus of the disease; the pulse is any thing but weak; it does not indeed manifest such resistance as in inflammatory fevers; but it resists sufficiently the finger applied to it; and becomes, during the exacerbation, often turbulent and somewhat hard. Perhaps it may depend on the prevailing inflammatory character of diseases in our time, that nervous fevers do not bear the very stimulating treatment which we find was employed so generally by physicians at the beginning of the present century. Hence salep,* muriate of ammonia, and blisters, often suffice to bring about a favourable issue to the disease; but on other occasions, mild stimulants, such as caryophyllata. and rad. arnicæ are required; it is only in a more depressed state of the powers of life, and when there is no hardness of the pulse, that camphor, angelica, valerian, liq. ammon. subc. and æther, &c. are necessary."

The practice may be best understood from the following cases.

Febris Nervosa.—A servant maid, 22 years of age, overstrained herself at work, and fell sick—head slightly affected—shivering and subsequent heat were the first symptoms. Ten days elapsed without her receiving medical aid. When she entered the hospital she had vertigo; headache; ringing in the ears; partial deafness; pale countenance; wearied aspect; dry tongue; tense abdomen; urine high coloured; costiveness; dry and hot skin, and a quick, though sufficiently strong pulse. Decoc. rad. gramin. ℥viij. sodæ sulp. ℥ij. As on the following day a slight evacuation had occurred, 15 grains of muriate of ammon. were ordered in the place of Glauber's salts, and a blister between the shoulders. She continued in nearly the same state for some days, though the tongue became cleaner and moist. Ordered infus. rad. caryophyllat., but as the pulse was more depressed and the skin remained dry, two grains of camphor were added to the infusion. It proceeded as a moderate nervous fever. Vertigo and deafness diminished though no crisis appeared. A cough came on with soreness of the throat and hoarseness: for this a linctus and decoction of salep *pro potu* were ordered; cough continued, with streaks of blood in the expectoration, caused by straining in coughing—there was neither pain in the chest nor impeded respiration. She was in a very low

* The dried root of the Orchis, morio et mascula.

state—pulse weak. Instead of camphor ʒss. of liq. ammon. succinat. was added to her mixture. Cough increased in violence—most troublesome at night. It now became necessary to adopt a decidedly emollient practice notwithstanding her diminished strength. She took dec. R. alth. cum inf. flor. papav. rhœad and syrup alth. with a blister to the sternum. Under the use of these the cough gradually disappeared—sleep undisturbed—perspiration, and by degrees a critical mucous sediment in the urine appeared—appetite returned; and by a restorative diet the patient entirely recovered.

We select the following case, with the accompanying remarks, as it is one of some interest.

"FEBRIS NERVOSA CUM MILIARIBUS RUBRIS ET ALBIS.—The miliary fever belongs to the exanthemata, which even now, as to their nature, are attended with much obscurity and uncertainty. During the last century, many physicians wrote on dreadful miliary epidemics, whilst some regarded this eruption as a symptom of no moment; nay, even as the mere consequence of neglected cleansing of the primæ viæ, or of the too heating regimen then observed in fevers. It is, doubtless, true that it may be artificially produced by the above circumstances, especially by the employment of unduly stimulating remedies; but without these, in certain years it appears as a symptom in many diseases; I am even persuaded that there exists a distinct idiopathic miliary eruption; and I had several very difficult and dangerous cases of it under my care in the years 1814 and 1815.

"This idiopathic eruption manifests itself chiefly by an uncertain acute course of the fever; there is a very quick, excited and tense pulse, which on uncertain days, seldom from the 4th to the 7th, more frequently on the 11th, 14th, or 17th, is accompanied with an indescribable anxiety, a tightness and contraction at the left side of the thorax, irregular respiration, with frequent sighing, a very peculiarly hard sounding cough, and frequently an irregular intermittent pulse: the pathognomonic signs of pleurisy or peripneumony are wanting, and one is at a loss satisfactorily to account for the appearance of these symptoms. It is now that either the red or white eruption breaks out in an irregular manner, and with copious perspiration; it often suddenly disappears, and at an uncertain period a fresh eruption takes place. Should the violence of the fever apparently diminish after the eruption, and the pulse become more calm, slow, and soft, it is a favourable sign; but should, as unfortunately is too often the case, (even after a copious and high-coloured eruption) the fever continue violent, and the pulse be very frequent and

hard, there is always great danger, and the disease often in a few hours terminates in death. In such a case I found, on examination, the pericardium inflamed.

The symptomatic miliary eruption which takes place, more particularly in puerperal, nervous, and putrid fevers; and sometimes in genuine inflammatory and bilious ones, is of great consequence; for if, after its appearance, the symptoms of the disease are not materially improved, it is always of serious import. It is seldom absolutely critical (except in inflammatory gout), and it is only of no consequence when it appears, after other effectual and salutary critical symptoms, or where there is no accompanying fever. Whether the idiopathic miliary fever, which is epidemic in some years, is also contagious, I cannot from experience determine. The following is a remarkable and dangerous case of nervous fever, in which this eruption bore an essential part:—

"Anna Böhm, twenty years old, a chamber-maid, travelled with her master's family from Vienna to Prague, and ate during the journey little else than fruit and vegetables. She brought on a confirmed diarrhœa, to which, during ten days, she paid no attention, till at length blood was passed, and she was extremely reduced. A physician ordered some medicine not specified, which immediately stopped the purging; but violent headache, ringing in the ears, great thirst and heat of the body came on, which induced her to apply, on the 20th of July, to the General Hospital. Her countenance was flushed, the tongue white, and the taste bitter, she desired acid drinks, the chest and abdomen were free from pain, there had been no stool for three days, the urine was high-coloured, the pulse quick, full, and tolerably strong. Ordered, dec. gramin. ℥viij. pot. tart. ʒij. syr. rubi ℥ss.

"On the following day, the red miliary eruption showed itself on her breast and arms; she had three stools of a soft consistence. In order to avoid bringing on again the diarrhœa, ammoniæ muriat. gr. xv. were added to the decoction instead of the soluble tartar. She went on till the 26th, when the eruption began to disappear, without evident marks of crisis: indeed she was much more restless, wandered, and fell into a state of insensibility; spontaneous evacuation by stool, trembling, deafness, a dry hot skin, and great depression of the pulse, excited our alarm as to her safety. Flor. arnicæ ʒij. f. inf. ferv. col. ℥viij. adde camphor. subact. gr. ij. muc. acaciæ ℥ss. As her strength still diminished, and subsultus, with picking of the bed-clothes came on, the dose of camphor was increased. Ammon. subcarb. and castor. āā gr. ij. were given together in powder; also liq. ammon. succinat. ʒj. was added to the infusion. Blisters and

sinapisms were repeatedly applied. Notwithstanding the diligent employment of these restorative means, she fell into a state of the greatest possible debility; there was strabismus and the hippocratic countenance, the pulse was extremely quick, and from its weakness scarcely, and only with great attention, to be felt, which, with coldness of the extremities and the constantly dry skin, made us, during four days, consider the patient in a dying state.

"The only means left, so far as regarded the suppressed eruption which appeared to be the cause of these bad symptoms, was the use of lukewarm aromatic baths, to each of which was a solution of half an ounce of potassa fusa was added, and the skin afterwards rubbed; the most surprising and powerful effect was produced by the employment of them; the patient was more quiet, perspired, and slept several hours after the first bath; after the third, the eruption broke out on the whole surface, but in its white form. After some days of the greatest danger, the urine became turbid, and threw down a thick mucous sediment.

"It was now the twenty-first day of the disease: her state became evidently better, the delirium went off; her consciousness returned, she felt renewed strength, got sleep, the pulse rose and was more free, but the ringing in the ears lasted long, and ceased only by degrees. In the state of convalescence, bitters, with spt. æth. nit. et sulph. compos. were employed to aid the digestion, and a moderate portion of wine was allowed. As she was young her strength soon returned; and freed from her sufferings, she in six weeks enjoyed perfect health."

A *case of Pleuritis Nervosa et enteritis occulta*, terminating in death; one of *Febris Nervosa cum enteride, orta ex pleuritide*, successfully treated, are next narrated: of these, we shall omit the details, and pass on to the consideration of

Putrid Fever, of which there were two cases treated—both the result of previous neglected gastric fever. They were attended with a broken crasis of the blood, and violent diarrhœa, and were admitted when the disease was fully formed. The following case may serve to illustrate the treatment.

"Febris putrida gravior.—Johann Czermak, a student, 19 years old, without evident cause, became ill of a gastric fever, on the 1st of February, 1823, refused every assistance, and came in a wretched condition, on the 22d of the same month, into the hospital. General depression and loss of strength, so that he could not sit up, his countenance sunk, pale, and peculiarly disturbed, sunk eyes, stupid looks, tinnitus, vertigo, a dry brown coat on the tongue, teeth and lips. Trembling of the limbs, the belly drawn up, painful on pressure, frequent and very fœtid

stools, a dry skin with burning heat, the pulse frequent, soft, and weak, presented themselves as the characteristic symptoms of the before-named disease: there was ordered, R. rad. arnicæ ʒij. ft. inf. fervid; colat. ℥viij. adde ext. columb. ʒij. mucilag. acac. syr. papav. āā ℥ss.

"R. ipecac. contr. gr. iij. sacch. pur. ʒj. div. in dos. vj. sumat. unam secundâ quâque horâ

"Glysters made with an infusion of rue and chamomile with starch. Sinapisms to the legs, and emollient fomentations to the belly. As towards evening a smart exacerbation with a determination towards the head, came on, the countenance became flushed, and he wandered; four leeches were applied to the temples; when they fell off, he lay exhausted and without consciousness. Sinapisms were applied to the upper part of the thighs, and a blister to the neck, the medicine continued. On the 24th, the exhaustion was extreme. the belly distended in an uncommon degree, and painful, the stools voided spontaneously. Three leeches were applied about the navel, from a well grounded suspicion of concealed intestinal inflammation, the poultices which were troublesome from their weight were exchanged for fomentations. After the leeches he felt some relief, so that as there was still pain, two more were applied to the belly, and powders with ipecacuan. in divided doses with nutmeg ordered. On the 27th, the improvement was remarkable, the circumference of the belly less; he bore the handling of it tolerably well; the stools were diminished. On the 1st of March, the urine had marks of crisis, the evening paroxysms were more moderate, and he became stronger. On the 3d, the diarrhœa returned, the belly was without pain: ordered, R R. arnicæ ʒiij. ft inf ferv. ℥vj. add. ext. tormentillæ ℈j; mucilag. acac. syr. papav. āā ℥ss. The ipecacuanha powders were continued, the purging soon gave way, the skin became soft; perspirations followed; the urine for some days threw down a sediment, and the patient's look mended; thus his recovery went on slowly but uninterruptedly. On the 14th of March, the fifty second day of his illness, he left the establishment cured. This difficult case required throughout, the most strict attention to the state of the intestines."

We come next to *fevers with prevalent local affection*, and of these *Topical Inflammations* are the first to be considered. These were frequent this year, and each month had some examples of them. Those of the chest were most prevalent, particularly of the pleura and lungs. Of abdomiual cases, hepatitis and peritonitis were most common.

The antiphlogistic treatment was always adopted. Sometimes

the more energetic, as venesection; at others the milder, consisting of emollient, cooling, attenuating remedies.

"Encephalitis Phrenetica.—A woman, thirty-six years old, after great bodily exertion, was affected with headaches, and soon after fell into wandering and insensibility; in this state, and on the third day of her illness, she was brought into the hospital. A peculiar laughing gay look, the face hot but not flushed, rolling eyes, continued prattling, with a busy motion of the limbs, characterized her state; the pulse was very quick and contracted, though from the continual motion of her hands, this could scarcely be accurately determined. As she would not remain in her bed, it was necessary to put on the strait jacket. She was bled to eight ounces: cold applications to the head, a mixture with dec. graminis et sodæ sulph. and a powder with a grain of calomel, given every two hours, procured, within five hours, quietness, and in three more brought the patient back to her consciousness and reason. On the following day, as she still complained of headache, and the head was hot to the touch, six leeches were applied to the temples, the wounds bled freely, and these symptoms disappeared. She had some loose stools, and a sediment appeared in the urine; the calomel was omitted, and her mixture not given so frequently: by its continued use she was cured within three days, and in a week left the hospital."

Inflammations of the Throat.—Of the five that were admitted this year, the following cases are selected in illustration:

"Angina faucium.—A stout servant maid, twenty-six years old, told us that she had frequently had sore throat, and that if she got the least cold, it was followed by a difficulty in swallowing. On this occasion she had caught cold from washing linen; there was alternate heat and cold, accompanied with great pain in the throat. When taken into the hospital on the 14th of February, (the second day of her illness,) it was only with the greatest pain and exertion that she could swallow; the velum pendulum, uvula, and tonsils, were of a deep red colour, and much swollen; one might also from without feel the tonsils enlarged; the fever was rather violent, the pulse frequent and compressed, without being hard. Ordered four large leeches to the neck, an emollient gargle of decoct. alth.; emollient fomentations to the neck; inwardly, decoct. altheæ cum roob sambuci. The leeches gave great relief. The inflammation was, by the diligent use of these remedies subdued in four days. On the 20th of February, the ninth day of her illness, she returned to her service cured. Critical sweats, and sediment in the urine, took place on the 5th, 6th, and 7th days."

The succeeding case is one of much interest.

Inflammatio Glandulæ Thyroideæ.—The following uncommon and interesting case came on in the form of an inflammation of the thyroid gland:—Anna John, twenty-four years of age, a nurse of a middling stature, weaned her child on the 16th of December, 1822; two days after, she had headach, heat and cold, with complaints in the neck, for which she took some medicine at home.

On the 20th, she came into the hospital in the following state:—She had pain at the back of the head, her countenance was pale and sunk, her look melancholy, her thirst increased, her voice weak, deglutition impeded, but without traces of angina, the tongue somewhat white. On the neck externally, the thyroid gland was enlarged, the skin stretched, and painful to the least touch; on a deep inspiration, she felt a darting pain in the fore part of the breast, without any cough being excited; at the same time there was a constant inclination to vomit, though she felt no pain from pressure of the stomach; the urine was rather high coloured; she had had two loose evacuations; the warmth of the skin was moderately increased; the pulse frequent, oppressed, and small; she felt herself, moreover, very much cast down.

"The disease was as to its form considered to be an inflammation of the thyroid gland. yet the troubled, pale countenance, the great debility, the contrast in the symptoms, viz. the impeded deglutition without any inflammation or other mechanical impediment, the almost extinguished weak voice, the pains of the chest, without the other signs of inflammation, the constant inclination to vomit, without gastric impurities or pain at the stomach, the circumstance of an oppressed small pulse, seemed to warrant the conclusion, that it bore rather the character of a nervous fever. But if one considers the tenor of all the symptoms collectively, and compares them with the physiological destination of the organs, it will appear that the pain in the occiput, the peculiar derangement of the vocal organs, and of the deglutition, also of the expectoration and stomach, announce a morbid affection of the nerves supplying the neck, chest, and abdomen, as the cause; and from the deranged functions of which, from inflammatory irritation, all the symptoms are satisfactorily explained. Hence, a rather antiphlogistic treatment was directed against this inflammatory irritation; six leeches were applied to the thyroid gland, and along the neck, emollient fomentations; decoct. salep, and every three hours half a grain of calomel was administered. In the evening, as the tense pain of the

gland continued, six more leeches were applied, and mercurial ointment was rubbed in on each side of it.

"On the 21st, her state was, after a rather unquiet night, much the same, only the constant inclination to vomit had diminished. A blister was now applied to the nape of the neck. Towards the evening, the deglutition was easier; vomiting still took place, by which a little phlegm was thrown up; for this, powders with four grains of magnesia, as much sugar, calomel and hyoscyamus, each half a grain, were given every three hours.

"On the 22d, the swallowing was still better, and the vomiting had ceased by the use of the powders, the swelling and pain of the thyroid gland were considerably less; the patient had four loose stools, the urine threw down a mucous sediment, the pulse was still frequent, yet more free, and sufficiently strong.

"Dec. 23d, all the symptoms are milder, the gland is almost free from pain, but hard; the patient has a cough; the same on the 24th, though at night a troublesome vomiting came on again, and she suffered a good deal from the cough and mucous expectoration; she now took powders with half a grain of hyoscyamus, ung. hydrarg. to the region of the stomach, and a blister was applied to the sternum. On the following day she experienced much relief; though on the 27th, the gland seemed to be more swollen, tense and painful; the cough continued, though the breathing was perfectly free; four leeches to the gland, and emollient applications were employed, she continued the salep decoction. In the days which followed she improved, though, on the 30th, she felt again severe pains in the gland, for which four leeches were applied. Finally, by the diligent use of emollient cataplasms, and inunction of mercurial ointment, the inflammatory disposition of the part was overcome, and it was restored to its natural size; so that on the 4th of January, the patient was quite well.

"On that day, however, towards evening, without any cause, she had a smart attack of fever, with shivering and heat, which returned on the following day at the same hour.

"We looked for an intermittent fever, and merely observed its progress, but she had no return of it; and on the 15th of January, she left the hospital cured."

Inflammations of the Thorax.—"These inflammations are divisible into pleurisy, peripneumony, pleuro-peripneumony, and inflammation of the trachea and bronchia. Pleurisy is characterized by a continued pungent pain in the side

of the chest, which is increased by a deep inspiration, and is attended with inflammatory fever, dry cough, a full, hard, though also often an oppressed pulse. When the lungs are inflamed there is no positive pain, but a constant sensation of oppression, and a cough, which is excited by a deep inspiration, respiration laborious, and expectoration bloody.

Pleuro-peripneumony is a combination of both the foregoing affections.

Tracheal inflammation is known by a sensation of pressure of contraction under the upper part of the sternum, peculiar anxiety, difficult, often wheezing respiration, harsh sounding cough coming on by paroxysms, and attended with symptoms of suffocation, with strangulation and convulsions.

Expectoration at first scanty and streaked with blood, afterwards becoming more tenacious or thicker, is white, saffron, or cinder-gray in colour.

Pluritis Spuria.—"There is, without doubt, a difference between this and the rheumatic pleurisy; the latter is denoted by a less violent febrile affection, and by an unsteady wandering pain in the pleura costalis, which may sometimes be even more violent than in the genuine pleurisy. The former, viz. the pleuritis spuria, has its seat in the intercostal muscles, and the patient cannot bear handling of the affected part, which is often swollen; in this also respiration is much less disordered. The fever may assume a genuine inflammatory or rheumatic character; and this inflammation may spread to the pleura, and the disease thus become genuine pleurisy.

"Anna Pintona, a maid-servant, twenty-two years old, was seized on the 2d of December, from taking cold, with headach and stitches in the left side; when admitted on the 4th into the general hospital, she had shooting pains in the head, the tongue somewhat coated, she had thirst, and when she drew in her breath, or moved her chest, the pain on the left side was increased, where also a swelling was perceptible, which, from pain, did not admit of being handled; respiration was not impeded to any degree, the pulse was accelerated, somewhat full and hard. She had been bled whilst at home; at the hospital she had merely decoct. althææ cum potass. nit. and an emollient cataplasm. Even on the following day critical appearances were observed in the perspiration and urine, and the remaining symptoms were much less violent. As she was of a costive habit, half an ounce of sodæ sulphas was added to the mixture. On the 17th she left the establishment quite well."

Pleuritis Rheumatica.—"Josepha Paul, twenty-two years old, a maid-servant, was, on the 2d of March, after ex-

posure to cold, attacked with shivering and fever; as headach and pain in the side came on during the following days, she was received on the 6th of March under our care. She complained of violent headach, tightness and sense of burning in the eyes, the cheeks were flushed in their circumference, the respiration natural; a more deep inspiration was prevented by cough, and wandering pungent pains, which had now fixed themselves on the right side of the chest; the bowels were costive, the pulse quick, full, and somewhat hard. ℞. Rad. gram. ℥j rad. alth. ʒij. coque per ¼ hor. sub finem solve mannæ ℥j. colat. ℥viij; six leeches to the part affected, emollient cataplasms and clysters. As on the following day the pain was milder, but more extended over the chest, a blister was applied between the shoulders. On the 9th, the headach became worse, and the pleuritic pains were increased; so that five cupping-glasses with scarification* were applied to the part affected, and a blister to the neck; critical symptoms in the urine and perspiration now appeared, and on the 12th she was discharged cured."

Pleuritis Genuina.—"Maria Scopin, forty-five years of age, a charwoman, sought, on the 1st of February, (the sixth of her illness,) relief in the general hospital for violent pleuritic pains. The breathing was short and hurried; a deep inspiration was prevented by its producing a pungent pain in the chest, which was attended with a dry cough; the fever was high, the pulse very frequent and hard. Prescribed, to be let blood to eight ounces, emollient cataplasms; and as the bowels had not acted for two days, emollient clysters; inwardly, dec. alth. cum pot. nit. et syr. alth. The blood was covered with a thick tenacious coat. On the following day the fever was more moderate, but the pleuritic pain still great; six leeches were applied, and the bleeding afterwards from the wounds encouraged as much as possible by the repeated application of sponges dipped in warm water. As the pain did not still entirely remit, on the following day a blister was applied to the parts, by which all complaints were removed. On the 5th of February, the eleventh of her illness, the urine appeared saturated, and soon threw down a sediment; and on the 8th, she left the hospital almost entirely restored to health."

A number of other cases with various complications follow. Those of most interest are,

Peripneumonia Catarrhalis Subsequentibus Morbillis.—"Mathias Stora, a school-boy, eleven years old, was, at the

* The German scarificator has nine small lancets, and the cupping-glass contains about ℥iss of blood.

end of April, taken, after preceding shivering and heat, with pain in the head, and a sense of weight at the chest; he coughed much, and expectorated a quantity of gray mucus. When on the 3d of May he came into the hospital, he had violent pain in the forehead, tinnitus in the left ear, dry lips and tongue, and great thirst; he breathed short and quick, with difficulty, and complained of pressure in the chest, which, when he attempted to make a deep inspiration, was increased, and brought on cough; this was dry, the skin hot, the fever violent, the pulse uncommonly quick, though not hard; his countenance pale and puffed up, gave the disease an uncommon aspect. During the two following days the measles came out; four leeches were applied to the chest, and dec. alth. cum pot. nit. et roob sambuci was ordered. The eruption was attended with delirium at night, spread very regularly, and disappeared gradually, with sweating, and pale yellow urine with slimy deposit, by the 9th. But now a truly inflammatory affection of the windpipe came on, which spread itself into the ramifications of the bronchia (bronchitis catarrhalis.) The cough became barking and hollow, and the pulse more feverish; two leeches were applied to the neck, emollient cataplasms and a gargle; he took dec. alth. ℥viij; pot. nit. gr. xij; ext. hyoscyami gr. ij; ext. glycyrrh. ʒj. But afterwards, in its stead, dec. sem. lini, and powders with one-third of a grain fol. digital. Lastly, (17th May) powders, with potass. sulphur. gr. ij. every three hours, which last produced a most striking effect; the barking cough ceased, a copious puriform expectoration followed, all fever disappeared, the urine became turbid, as if mixed with clay, and threw down a sediment. On the 22d, he went home to his parents quite well."

Peripneumonia in Febrem Nervosam Transiens.—"Maria Werch, a maid-servant, twenty-six years old, had brought on fever by getting cold, to which was soon added a dull pain in the head, great thirst, and a sensation of pressure and tightness about the sternum, with cough. On the 9th of January (the fourth day of her illness) she came under our treatment; she complained of a continued oppressive pain, as though a weight was laid upon her chest; could not breathe deep without bringing on cough and increase of the pain; she expectorated some slimy matter mixed with streaks of blood; the skin was dry, the pulse very frequent, oppressed and small. Ordered, blood to be let to eight ounces, cataplasms to the breast, and dec. alth. cum pot. nit. et roob. sambuci.

"In the evening she was still much troubled with the

cough, the other complaints of the chest were, however, diminished; and the bloody expectoration had disappeared. On the third day there was for this ordered a linctus, with syr. alth. et gum. acaciæ, and a blister to the sternum; and on the fourth day the emulsio gummosa. The affection of the chest became better, but a sinking of the pulse gave reason to fear that a nervous state was forming; the tongue became dry, the skin ceased to perspire and was hot; the expectoration was with difficulty brought up; ordered, dec. alth. cum oxymel. also pulv. rad. ipecac. gr. ij. sulph. sublim. gr. vj. sacch. pur. ʒj. m. f. p. divid. in dos. No. sex. a powder every three hours. On the 18th, the patient complained of swimming in the head, the lips were covered with a brown crust, the thirst increased, the breathing was free, the pulse contracted and small; six leeches were applied to the sternum; after the bleeding had ceased, a large sinapism both to the chest and to the calves of the legs. Notwithstanding this, the nervous character became more developed, the head was oppressed with stupor, the countenance pale, the lips united with a black paste, the tongue red and quite dry; the affection of the chest was less, and the abdomen pretty free, the stools soft, the pulse very frequent, small, contracted and weak: a linctus, with gum arabic and oxymel of squills, was ordered; also a blister to the lower extremities; then dec. alth. cum Camph. gr. ij. et oxymel. simp. given; and to relieve the laborious expectoration, powders with antim. sulph. præcip. gr. ss. every three hours. During the use of these remedies the pulse rose, she had gentle perspiration at night, her thirst diminished, the head became freer, the tongue by degrees moist and cleaner, and the urine, which was pale red, threw down a sediment. Dec. alth. cum decoct. polyg. amar. was now had recourse to; and finally cinchona with polyg. amar. by which remedies the patient gradually recovered; but it required about a month before she was sufficiently strong to return to her service."

Inflammations of the abdomen are next considered; they consist of inflammation of the liver, peritoneum, intestines, and occasionally puerperal fever, with its various modifications.

Inflammation of the liver frequently occurs, and occasionally with great acuteness.

The convex surface is much the most subject to inflammation, and it has a great resemblance with that of the right pleura, having the same darting pain increased by a deep inspiration which excited coughing.

Inflammation of the concave part of this organ is rare in Prague. It is attended with tension, anxiety, nausea, eructation, and symptoms of jaundice to a high degree. It may be easily confounded with bilious fever, an error of great consequence in practice; as emetics, which would be pernicious in cases of inflammation, might in bilious fever be of great use.

In doubtful cases it is best to pursue an antiphlogistic plan combined with laxatives; more especially as bilious fever is accompanied with a state of irritation which may be readily urged into inflammation.

The treatment in obvious cases, consists of antiphlogistic remedies, with topical, or, in violent cases, general blood letting; laxatives, as altheœ graman, tamerindi, pruna, potassæ tartras, emollient cataplasms, and clysters. When after the fever has abated, and partial obstructions alone remain, as also in cases of chronic inflammation, calomel and mercurial friction have a very salutary effect. The following cases illustrate this practice.

Hepatitis.—"Anna Herzogen, a maid-servant, twenty years old, was, without being able to assign a cause, seized with shivering and heat. She had pains in the belly, which became fixed in the right hypochondrium. When on the 3d of February, she came under our care, she complained of headach, she had a slimy taste, and eructation, the tongue was white; when she drew in her breath, the pain in the right side was greatly increased; this part was perceptibly swollen, and painful to the touch; she had had no stool for some days; the pulse was moderately frequent, full, and soft. Ordered, six leeches to the region of the liver, emollient cataplasms and clysters, also dec. alth. Oss; mannæ ℥j. It was necessary from increase of the pain to apply eight more leeches; the urine became turbid, and the pains with this treatment gradually disappeared: Ammoniæ mur. ℈j. was now added to the mixture, with the continued use of which, for several days, the tongue became clean, the appetite returned, and on the 19th she left the hospital cured. The presence of gastric impurities, could not here be doubted, yet an emetic would in the inflammatory state of the liver have been highly prejudicial."

Hepatitis Rheumatica Levis.—"Rosina Klimin, twenty years old, a maid-servant, was on the 26th of November, without assignable cause, taken with fever; she soon felt a fulness and tension on the right side of the abdomen, which ended in sharp pains. On the 4th of December she came

into the clinical ward. She complained of headach, bitter taste, the tongue was coated, she had pricking pains in the right hypochondrium, which were increased by making a deep inspiration, and by handling the part, they extended to the right shoulder; neither tumour or hardness was perceptible; the pulse was moderately frequent and full. Ordered, decoct. alth. cum pot. nit. et roob. sambuci; emollient cataplasms to the region of the liver and clysters. Within four days, all symptoms of inflammation had disappeared, and a crisis took place with abundant perspiration."

Hepatitis Chronica.—"Anna T., twenty-five years old, a chamber-maid, of a moderately robust and phlegmatic habit, enjoyed up to her twenty-fourth year tolerably good health; at which period she had an inflammation of the liver, and which, not having been entirely removed, had, for a year, caused her much suffering. An irregular state of the bowels, at one time constipation, at another diarrhœa, loss of appetite, compression, tightness, fulness, and frequently returning pains in the liver, palpitation of the heart, a yellowish pale countenance, and leucorrhœa, were the symptoms which presented themselves. By examination the liver was felt to be evidently enlarged. The cure was begun with decoct. gramin. cum inf. glycyrrh. and emollient catalapsms; afterwards, decoct. taraxaci, with a powder containing half a grain of calomel, twice a day, also frictions with unguent. hydrargyri et digitalis; next Plummer's pill, and when costiveness occurred, a neutral salt, as sulphate of soda, or of magnesia, was added to the mixture; which, when the bowels were regular, was changed for the muriate of ammonia; for the leucorrhœa, frequent ablution, and afterwards injections of decoct. quercûs, cum alumine were employed. By the long continued use of laxative remedies, as decoct. graminis cum potass. tart. vel supertart. or decoct. cichorei; and lastly, inf. anth. cum tinct. rhei aquosâ, she was freed from her complaints; there was no longer any tumour to be felt, the leucorrhœa had ceased, her menses had regularly appeared, she had acquired a blooming, sound aspect, had an excellent appetite, and good digestion, with a regular alvine excretion; she left the hospital cured in two months. In this case the calomel readily brought on diarrhœa, but taken in combination with sulph. ant. præcip. she bore it well; generally speaking, in such chronic inflammations of the liver, the physician must not be impatient; by a continued and well directed mode of treatment, one is able even in very difficult cases often to bring about, unexpectedly, the most happy results."

[TO BE CONTINUED.]

UTILIA FIDELITER EXCERPENDUM.

ANALYSIS

OF

AMERICAN MEDICAL JOURNALS.

ART. I. *The North American Medical and Surgical Journal for January* 1828.

THERE would seem to be a desperate struggle between our respected cotemporaries, the American and the North American Journals, for which shall have the largest number of "collaborators;" as yet, the latter has triumphed—but we have no doubt that with very slight exertions, both will be able to obtain a still greater number of *names!* (*vox et preterea nihil*) upon which they appear to found their hopes of success! We are half inclined to believe that it is better to have a journal depend solely upon its intrinsic merits, rather than the ephemeral distinction it may acquire by having the *shadow* without the *substance.* We speak thus from having seen *names* attached as "collaborators" to journals, who lend the influence of their *experience* to others.—

1. MECHANISM OF PRETERNATURAL JOINTS.—Dr. Hewson, in a paper on this subject, mentions a case of artificial joint in the humerus, in which the operation of passing the seton was twice ineffectually performed by Dr. Parrish. Dr. H. does not consider this practice applicable to fractures presenting irregular surfaces, and he attributes the failure in this instance to this circum-

stance. The operation of Mr. White, sawing off the un-united extremities of the bone, was subsequently performed by Dr. H., and after the lapse of four months the union was completed, and the powers of the limb restored.

A successful case of un-united tibia, treated by the application of caustic potash, as suggested by Dr. Hartshorne, is detailed. In our number for April 1826, page 277, will be found a paper by Dr. J. R. Barton on the subject; we believe that his was the first case in which success followed the application of caustic *immediately upon the fractured extremities* of the bone. The practice is worthy of more extensive trial; we conceive it preferable to Mr. White's mode of treatment, and particularly adapted to those cases in which the seton fails.

—

2. Diseased Ovarium.—Dr. J. M. Paul gives the history and dissection of a case of disease of the ovaria, in which by ulceration, a communication was established between them and the bladder, which was found to be also in a diseased condition. The diseased mass was found to contain *hair*, and *five teeth* (vide Baillie's *Morbid Anatomy*).

—

3. Colica Pictonum.—Dr. Harlan having had for several years the professional charge of probably the most extensive white-lead manufactory in the United States, renders a paper from him on the affections arising from the deleterious operation of lead on the system, peculiarly valuable.

Called to a violent case of *colica pictonum*, the following is his practice, "to bleed from the arm, and in some cases cups are applied to the abdomen, or a mustard plaster, followed by an epispastic over the inflamed skin. But, at all events, I lose no time in administering calomel and opium, in the proportion of ten grains of the former to two or three of the latter; and, if there be no nausea present, two grains of ipecacuanha are added. The whole powder is repeated every two or three hours, until pain is relieved or ptyalism is induced; it is then omitted, and one or other of the following cathartics given. R. sal. eps. ℥j., magnes. ustæ. ℥ss.; mix them in a pint of water, and take from a wine-glass-ful to a tea-cup-ful every two hours. Or, R. rad. rhei contus. ℥ss., fol. sennæ ℥j., sem. cardam. ʒij.; decoct in one pint of water. The dose is one wine-glass-ful every two hours, until the bowels are evacuated." Dr. H. considers the excitement of ptyalism of vital importance in violent cases, and therefore directs the blisters to be dressed with ungt. hyd., and mercurial frictions to be resorted to. Turpentine injections are valuable adjuvants; when much heat of abdomen, with soreness on pressure, injections of cold pump water are attended with advantage; also affusions of cold water on the extremities.

In still more violent cases, attended with severe irritability of the stomach and bowels, after all the ordinary remedies, as laudanum, peppermint, calomel and opium, &c. have failed, Dr. H. has succeeded in allaying the irritability almost instantly, by the powdered *saccharum saturni;* the following is his prescription. R. cal. ppt. gr. v., pulv. opii. gr. ij., pulv. sacch. sat. gr. iij.—m. ft. pulv.; to be repeated every two hours until relief is obtained. Several cases where the disease had terminated in paralysis of the extremities, recovered under the use of nux vomica, caustic issues, and purgatives.

—

4. Hæmoptysis.—Dr. Condie, in an article on this subject, states, that he views this disease as dependent upon an irritation of the mucous coat of the lower portion of the trachea, or of the bronchia, in consequence of which irritation its vessels are induced to take on a hæmorrhagic action.

We discover nothing particularly novel in the mode of treatment; he says, "when hæmoptysis is attended with much cough, after due depletion, the following prescription will be found not only greatly to relieve this troublesome symptom, but also, to produce a beneficial result upon the hæmor-

rhage. R. Pulv. ipecacuanhæ gr. vj.—viij., pulv. opii. gr. ij.—iij., gum acaciæ ℈j. m.; for eight powders, one of which is to be taken every three hours."

—

5. Lumbar Abscess.—This case was published in the extra-limits of our last number, page 233.

—

6. Vaccination in Gout.—Dr. D. T. Coxe makes a note of a case of gouty inflammation *cured by vaccination* over the diseased part—the fact is worthy of record.

—

7. Bilious Pneumonia.—Dr. G. B. Wood gives the description of an epidemic which prevailed in the spring of 1824, among the children of the Pennsylvania Institution for the Deaf and Dumb; it bore a strong resemblance to that form of pectoral inflammation, called bilious pleurisy, or in its low type typhoid pneumonia. There is nothing novel in the treatment; we may remark, however, that Dr. W. is not a disciple of the "Omniscient Modern French School of Medicine," and that, although his practice was not *à la Broussais*, he did not lose a single patient during the existing epidemic—For ourselves, we think that "*Gastro-Entero-Duodeno-Cerebro-Colitis!*" and "*gum-water*," are becoming quite too fashionable.

The appearance of the disease in question was preceded by a long spell of warm and damp weather, and at the time of its occurrence, added to other circumstances, was a peculiarly disagreeable and unhealthy condition of the house. "The privy had been formed by simply partitioning off a portion of the cellar; and its contents, which had been accumulating for a long time, were supported on one side altogether by a feeble wall of brick. Through this they had, by their pressure, forced a passage, and inundated, of consequence, the neighbouring parts of the cellar. The air of the whole house was thus contaminated; and its offensiveness was immediately perceived upon entering the outer door."

—

8. Cold Water.—Dr. L. S. Tillet of Lancaster, Pa. gives some interesting cases illustrative of the beneficial effect of cold water in violent inflammations of the extremities, following fractures, wounds, and other injuries. Without attempting to depreciate the value of general and local depletion, which he correctly considers indispensable, he says, "I have only sought to raise from the situation of a humble auxiliary, a remedy, which some little experience has taught me, is entitled to rank as a principal." From the result of the cases detailed, we consider the remedy worthy of more extensive use.

—

9. Bronchial Disease.—A catarrhal disease appeared in this city in the early part of the past winter, and is described by Dr. William Darrach. The symptoms were, in the commencement, a shortness of breathing, which continued to increase till death; pulse small, quick, with little more than ordinary frequency; the mind remained perfect and calm; severe pain; two, three, and in one case, four days elapsed before the fatal termination; "the body was cold, pulseless, prostrated, and motionless; the countenance collapsed and fixed, like that of death; and no power of speech and deglutition existed; yet the patient continued, conscious of his situation, to make any efforts the attendants might request. He seemed to be patiently and quietly labouring under an obstructed respiration. The immediate cause of death in these cases was, evidently, the *copiousness of the mucous secretion*, which filled the ramifications of the bronchia, and prevented the access of air to the pulmonary circulation."

The treatment at first consisted of emetics, purges, alterative doses of mercury, blisters and stimulants; subsequently, after *post mortem* examina-

tions, local and general bleeding, copious and frequent; and at the close, spt. turpentine. They were equally ineffectual. Two cases treated under the combined use of the digitalis, and spt. of turpentine, at the suggestion of Drs. Hartshorne and Moore, terminated favourably.

Dissection.—The bronchial tubes were found filled with mucus, more or less frothy, differing in consistence, and of a yellowish colour. The lining membrane was deeply reddened, particularly where it covers the immediate ramifications of the bifurcations of the trachea, also the membranous part of the bifurcations themselves. The colour, in a few cases, was more brown than red.

10. Abscess of the Brain.—Dr. Bond details the history and dissection of a case of abscess of the brain. The case is curious and interesting.

11. Eruptive Disease.—Dr. Hewson gives an account of a peculiar eruption, which is sometimes observed to follow the internal use of balsamum copaibæ; we have had an opportunity of witnessing several cases of this kind, where the skin was covered with red blotches, apparently bearing the character of roseola; they were not elevated, and of a faint red colour. We do not remember before to have seen any account of this peculiar eruption. In the cases mentioned by Dr. H., as well as those which came under our own observation, (one of which was seen by Dr. J. R. Barton,) the eruption disappeared in a few days, under the use of gentle laxatives, and by discontinuing the use of the copaiba.

12. The next article is on Civiale's operations for destroying the stone. We must refer to the letter of Dr. Doucet, published in our number for April last, page 487, for similar information.

Thirty-six pages are occupied by the *interesting* report of the Medical Society on *quack Medicines!*

Art. II.—*The New York Medical and Physical Journal, for October, November, and December*, 1827.

1. Pectic Acid.—Some years since, the present distinguished professor of chemistry in the University of New York, Dr. Torrey, discovered a peculiar principle existing in the Tuckahoe, or Indian bread, which he denominated *Sclerotin*; the object of the present paper is to point out its identity with the vegetable principle, called by Braconnot, *Pectic Acid.*

2. Hydrocephalus.—Dr. C. A. Lee details a case of Hydrocephalus Internus, in which he performed the operation of paracentesis cerebri. The child died about seven weeks after the operation. Dr. L. concludes his paper with some judicious observations on the propriety of the operation in the chronic form of the disease, with which we are disposed to coincide.

3. Human Teeth.—The remarks on the structure, organization, and nourishment of the human teeth, by J. Trenor, M. D. Dentist, we must pass over to practical matter.

4. Un-united Fracture.—Dr. J. K. Rodgers, surgeon of the New York hospital, relates a case of un-united fracture of the humerus, successfully treated by Mr. White's plan of sawing off the ends of the bone, after the se-

ton had been faithfully tried for six months, and removed without any beneficial result.

5. Extirpation of Tonsils.—Professor Stevens gives a description of an interesting instrument he has had constructed for extirpating enlarged tonsils; it consists of an "oval-shaped single canula, about four inches long, receiving through its whole length a steel male screw, with an oval shoulder near one end, which is perforated with a small eye; to the other end is fitted a small female thumb-screw. The eye receives two ends of iron wire well annealed and tough, an inch of such size that weighs a little more than one grain. I take of this wire a piece three inches and a half in length, and passing one quarter of an inch of either end in contrary directions through the eye of the screw, I twist them upon each other. This leaves a circle of an inch diameter, and the wire, when drawn straight, was one and a half inches from the eye of the screw, which when fitted to the canula was exactly flush with it."

Two cases are related in which professor Stevens employed it; in the first, by gradually turning the screw, so as to reduce the size of the circle, at the expiration of twelve hours, after detaching the wire, the tonsil was seized with a small hook, formed by bending the point of a probe, and snipped off with a pair of scissors. Scarcely a drop of blood followed. In the second case, the removal of the gland was effected in eight hours, about eight ounces of blood were lost. Dr. S. considers twelve hours the proper time for safely dividing the neck of the gland.

6. Intermittent Fever.—Dr. Fountain, in a highly interesting paper on this subject, takes occasion to make some observations on the pathological views of Broussais, with which we are disposed to agree. Having detailed the causes, pathology, symptoms and prevention of this disease, he next proceeds to the consideration of the treatment. Dr. F. divides the whole course of intermittent fever "into three periods, having three corresponding states; differing essentially from each other;" these are *its formation, its inflammatory, and its independent states.* The following remarks on the employment of quinine are judicious, and deserve consideration. "Since the introduction of quinine, the treatment of intermittent fever has become almost purely empirical; the consequence is, that the medicine, so important in itself, has depreciated considerably in the public estimation. Nor is this at all surprising, since it is resorted to, not only by the people, but by the faculty at all periods of the disease, and under all circumstances. Containing the active principle of the bark in a concentrated form, it is liable to aggravate and confirm all inflammatory affections. In fact, quinine, arsenic, and all other articles of the same class, are frequently entitled to the just reprehensions so freely bestowed on them by the disciples of Broussais."

Dr. F. is a very strong advocate for the use of arsenic in large doses after the system is properly prepared. He states that he has "twice cured quartan agues of two years' continuance, by giving three grains the day preceding the expected paroxysm." We have before expressed our opinion on this subject, and whilst we place the most implicit reliance in the above statement, still we should be unwilling to carry it to the same extent.

Art. III. *The American Journal of Medical Sciences, for February,* 1828.

1. Secale Cornutum.—Dr. Dewees gives his testimony in favour of the use of ergot as a powerful auxiliary in the practice of midwifery. The rules for administering it are well understood. Dr. D. gives it in doses

of twenty grains, and recommends that it should be kept whole in a glass bottle with a ground stopper; powdered as occasion requires, and never used when it exceeds a year in age.

Dr. D. gives the following as the peculiar, and distinctly marked characters of its action. "When ergot has been administered with success, we find the uterine effort not only more quickly repeated, and more powerfully exerted, but these efforts are accompanied with less suffering, than the same apparent exertions of this organ, where not urged by this drug. The woman, when interrogated with respect to her feelings, expresses her sensations by saying she feels 'as if every thing was forcing from her;' but at the same time admits, that the pains have not the same character with those she suffered before: indeed, it very frequently happens, that there is a great abatement of suffering, by converting a concentrated pain, and this most frequently in the back, to a more generally diffused one over the abdomen; or by obliging the back to participate if the abdomen has been the particular seat of it. At the same time, it must be confessed that the intervals between the contractions are more uncomfortable, as an almost constant nisus is kept up by the excited, or rather, it would seem, the goaded uterus, though the sensation does not amount to pain."

In doses of a grain three times a day, in form of pill, he has derived much advantage from it in cases of menorrhagia, where the long continuance, rather than the excess of discharge, rendered it important, it should be arrested. Its use in cases of polypi, to force these substances beyond the neck of the uterus, in order to apply a ligature to, or amputate them, is suggested.

—

2. Elongation of the Uvula.—None more highly respect the distinguished talents, nor are more deeply sensible of the many valuable professional improvements of Dr. Physick, than ourselves; it is with extreme regret therefore that we witness any thing claimed for, which does not strictly belong to him—his reputation does not stand in need of such a course, and we would strongly recommend to the editors of the American Journal of the Medical Sciences, no matter how anxious they may be for the name of Dr. P. to appear in their Journal, carefully to examine for correct information before they lay claim to originality.

We have been led to these remarks in consequence of a plate accompanying the paper describing an instrument for excising an elongated uvula—it is composed of two steel pieces, attached to one end of each is a steel ring, between the two is a lancet-shaped blade moveable on two screws which connect the pieces. The uvula is fixed in the rings, and the blade thrust forward by pressing with the thumb on a button at the extremity of the handle, when the uvula (or tonsils as the case may be) will be divided. An instrument upon precisely the same principle is described, and a plate of it given in the second volume of Heister's Surgery. We regret being obliged to make these observations; but in justice to our journal, our patrons, and ourselves as independent editors, we are compelled to point out errors in whatever quarter they may appear.

—

3. Pathology.—Two pages of observations on some points of pathology, in which Dr. Horner states he "is disposed to think" that some of the phenomena of inflammation arise mechanically.

—

4. Remittent Fever, Gastro-Enteritis.—Dr. Jackson occupies thirty-seven pages, with a detail of seventeen cases, being a continuation of the paper noticed in our last number page 159. They serve to illustrate the success of the physiological treatment of Broussais; the observations on them are sound, judicious, and valuable. Of the seventeen cases, eleven recovered, and *six* died.

5. Ligature of the Internal Iliac Artery.—Dr. S. P. White of Hudson, of New York, has succeeded in curing a case of gluteal aneurism by passing a ligature around the internal iliac artery. Surgeons now consider this operation established; it has been performed four times; three of the cases being successful, first in 1812 by Dr. Stevens in the West Indies; second by a Russian army surgeon, who received a pension from the emperor Alexander for his dexterity; third by Dr. White of Hudson; and fourth unsuccessfully by Dr. Atkinson in the York Infirmary.

—

We pass over the paper of Dr. Pendleton on superfœtation; the remarks on the various modes usually adopted for the removal of the tonsils, by Dr. A. E. Hosack. who advocates the knife in preference to the ligature; also the case of dissection wound, reported by Dr. Godman, inasmuch as some of the "collaborators" consider it a very doubtful case.

—

6. Mercurial Inhalations.—Next follows an interesting paper, by our friend Samuel Jackson, M D. of Northumberland, Pa. on the safety and advantages of mercurial inhalations, in many diseases "where that condition of the system occurs, which would appear to render all remains utterly nugatory, unless the patient can be speedily brought under the alterative or deobstructing powers of mercury," as in some congested and inflammatory cases of typhus, yellow, and bilious fevers; in local phlegmasiæ, pleurisy, &c. After all the ordinary remedies have been tried without success, and it is "too late to affect the system" by frictions and calomel, Dr. J. is in the practice of using inhalations of the medicine. The following is the preparation he employs. "Two drachms of aq. amm. are added to six ounces of distilled water, and four ounces of calomel are thrown into this liquor, and shaken with it; the powder is then separated by the filter and dried."

He has devised an instrument which directs the whole volume of vapour immediately on the patient's lungs. Its outline is a common tin funnel, about nine inches diameter at the base, with a flexible tube of spiral wire covered with morocco, attached to the pipe. "The base of the cone or funnel is closed with tin, and a door opens at the side large enough for the convenient introduction of a heated iron, weighing about two pounds. A little sheet-iron stand on the inside supports this iron, and thus prevents it from burning the bottom of the cone, or from rendering it too hot to rest occasionally on the bed."

"To use the apparatus, let the iron be heated not quite to redness, and placed on the stand; about ten grains of the powder are then to be thrown upon it, and the door closed. The flexible tube directs the smoke to the patient's mouth, whether his head be covered, as above mentioned, or not. When the evaporation ceases, another such portion is thrown on the iron, and from two to six such portions may be used in immediate succession. This process may be repeated every two, four, six, or eight hours, according to the exigencies of the case. When this method has been used for several days, the attendants have been salivated, and they must therefore be cautioned against respiring the fumes more than is unavoidable.

"We should not think it necessary to observe, were it not in our own defence, that we ought to be more assiduous in watching the effects than when mercury is used in any other form, We have brought the system under the influence of it in twelve hours; and we presume, from our little experience, that it must be a very intractable state of the body which can hold out more than two or three days. In the use, however, of this hitherto dreaded mode of administering the remedy, we must regard the pulse and the general system; for if in these the happy effects of mercurialization are observed, we must proceed with the utmost caution; but as soon as the fetid breath is perceived, we ought to suspend the operation, as the present object is now attained, and if additional mercury be required, we can administer it in the ordinary way."

The peculiarity of the practice recommended by Dr. Jackson, consists in directing the fumes to the lungs only; and to use them in ordinary cases where salivation may be indicated, and there is not time to effect it in the usual way. The safety of the practice we think is sufficiently established by the fact that Dr. J. has employed it in twelve cases. with all the advantages that could be expected from it, and without exciting excessive ptyalism in one single instance.

Two cases are detailed; in one, the patient was rapidly sinking after repeated attacks of remittent and intermittent fever. All the usual remedies had been employed—calomel and squills were given, but before it had time to affect the system, he sunk surprisingly, and was considered hopeless. In two days, fumigation took effect; the salivation was kept up by the blue pill, and he finally recovered. The second case is nearly similar.

The paper concludes with a violent philippic against "the anti-mercurial doctors," (to which the "collaborators" attach their protest,) and a high eulogium on the virtues of mercury, which he considers, with the exception of cinchona, "the greatest medical blessing a benevolent Providence has conferred on his suffering creatures."

—

7. Gun-shot Wound.—Dr. James A. Washington gives a detailed account of a case of gun-shot wound of the leg, above the ancle, in which it was estimated that five-sixths of the structure at the seat of injury was destroyed. More than an inch of the tibia and fibula was removed, also of the corresponding portions of the tibialis posticus, and the flexor muscles, leaving the tendo Achillis with a sound strip of skin covering it. The extensors and peroneal muscles, and the *anterior tibial artery* were found uninjured; these were covered with a sound strip of skin.

The boy was eleven years of age; he was admitted into the Pennsylvania Hospital, and in consultation, Drs. Barton, Hewson, and Parrish determined, in consequence of his youth, to attempt to save the limb. At the suggestion of Dr. Barton, wheat bran was applied to the wounded surface; the limb placed in a fracture box, upon a soft bed of cotton, previously spread over with bran, and the parts properly adjusted. The bran served to absorb the discharge, and was thus converted into a poultice, whilst by its compression, it would prevent inordinate hæmorrhage. For five days the bran was only partially removed, and fresh applied; on the sixth, the wound was entirely cleansed by means of a syringe.

It is unnecessary further to follow the details of this case; constitutional irritation of course arose, and was combated by the ordinary measures. The accident occurred on the first of September; the account is dated thirty-first of December, some weeks previous to which, the wound had entirely healed, with the exception of a small sinus; his strength is increasing, and he is able to be moved about the ward in a chair.

If this case had occurred to one of our "cutting surgeons," this poor boy's leg would have been held up in the streets, and in apothecaries' shops, as one of the glorious triumphs of the knife. Fortunately, he came under the care of those who would rather pride themselves upon the number of limbs they have saved, than the number of fellow-creatures they had mutilated.

—

Mr. George Carpenter makes some observations on the inefficiency of the cathartic powers of Rhubarbarine.

—

8. Volatile Alkali.—Dr. I. Moore, of Miss. details two cases, illustrative of the efficacy of the volatile alkali in the bites of venomous snakes. He employs the *Liquor Ammoniæ Fort.* in doses of a tea-spoonful, internally, and directs the wound to be washed with the spirits; the dose to be repeated frequently until the subsidence of pain. He states that in sixteen cases, within the last twenty years, success has followed the practice. There is nothing new in the practice.

A long article on the use of the lymph, and a case of poisoning by cantharides, concludes the original department.

—

Under the head of Intelligence, in a note, Dr. Chapman expresses his belief (with Cheyne) that the extensive use of mercury is productive of jaundice and hepatitis. He also states, that in a case of spasmodic croup, after using all the ordinary remedies, nausea was created, and a subsidence of the affection followed, in a few minutes, by directing "the smoking of a cigar."

—

9. Tetanus.–William J. Holcombe, M. D. of Virginia, relates a case of tetanus, successfully treated with arsenic; this remedy is worth further trial.

—

10. Bandage Roller.–Dr. William E. Horner gives a plate and description of a machine for rolling bandages. If he will lop off *nine-tenths* of the "machine," and simply stick "fig. 2" into a "hole in the wall," we venture to assert that it will answer as good, if not a better, purpose, than as connected with the useless and unwieldy mass of materials composing "fig. 1."

—

11. Excision of part of the Spleen.—Dr. W. B. Powell, of Ky. relates a case of wound in the left side, from which a portion of the spleen protruded; as it was found impracticable to reduce it, amputation of the protruded portion was determined on, and accordingly done. The patient recovered.

—

Dr. Mott's case of aneurism we mentioned in our number for July, 1826, page 189.

—

Report of the Committee of the Philadelphia Medical Society, on the *important* subject, "Swaim's Panacea," finishes the number.

Art. IV. *The Western Medical and Physical Journal (monthly) for October and November*, 1827, *and January*, 1828.

1. Sick Stomach.—Dr. Wright, in a paper on this subject, advances proofs which we consider satisfactorily identify this peculiar disease, which is endemic of particular situations in the Western States, with the ordinary autumnal fevers of that section of country. The following are the conclusions he has drawn from an attentive observation of facts, as well as the opinion of other physicians.

"1. That the cause of the sick stomach is still somewhat doubtful, and will remain so, so long as it is sought for amongst the vegetable or mineral poisons.

"2. That its great resemblance to many of our common autumnal diseases, renders it quite probable that it has, with them, a common cause, or an atmospheric origin.

"3. From its appearing epidemically in the same season, annually, or biennially, and but seldom occurring sporadically, it would be just to conclude, that it was the offspring of some general agent.

"4. Incidental effects never have their origin in established antecedents: and in all cases where there is a semblance of sequents, the same relation must exist in their antecedents. Therefore, if two or more diseases bear a striking and obvious resemblance, the rationale would establish a corresponding identity of origin. Hence the resemblance in most of our fall diseases; and if the sick stomach resembles, in all of its general characters, most of our

fall fevers, requiring the same general practice, the conclusion is safe, thatit belongs to this great family.

"5. The character of the *sick stomach* is sufficiently well understood for all therapeutical purposes; but it is likely, that, before a preventive is discovered, a cause of the disease must be established.

"6. The identity of this disease with the complaint in domestic animals called the *trembles*, is nothing more than conjecture; but if admitted, proves only, that they are subject to many of the maladies incident to the human family—a fact long known. I have seen in the same districts where the sick stomach, and ague and fever, were prevalent, coactively, dogs pass regularly through paroxysms of tertian ague, occurring successively at established periods."

In our volume for 1823, page 254, is a highly interesting essay on this disease, by Dr. A. M'Call, of Nashville, Tenn. It is termed by him, Milk Sickness, and the doctrine that it is *morbus ipse* is advocated, and that it can invariably be traced to taking into the stomach, the milk, butter, or flesh of animals that had laboured under the same disease; the doctrines advocated by Drs. Wright and M'Call, judging from the facts adduced on both sides, would seem to leave a doubt as to its nature and origin, still to be settled by further investigation.

—

2. Typhoid Fevers.—Dr. Drake makes some highly judicious observations on the typhoid stage of autumnal fever. Speaking of blood-letting he says, "it often saves the life of the patient, although it may not *cure* the disease; and when typhus symptoms ultimately ensue, after free and early bleeding, they are, in general, less formidable, than if they occur without that evacuation. In epidemics of this kind, I have seen copious and repeated blood-lettings followed by a degree of *subsultus tendinum*, little short of that which the muscular system exhibits in chorea, or the more uncommon malady denominated *paralysis agitans*:—a condition which excites alarm, but in most cases, yields to moderate stimulation."

In the typhoid stage of autumnal fever, "the immediate indication is to restore a healthy condition, not to supersede one morbid action by exciting another; and, therefore, we should prefer those medicinal agents, which, in their effects, are most analogous to the ordinary supporters of life—*excitants* rather than *irritants*. If this practical rule be correct, it follows that the *liberal* administration of calomel and tartar emetic, which is sometimes prescribed, must of necessity be prejudicial. In the state of fever now under consideration, these energetic agents are, it is true, not without their use; but they should be given solely with a view to their *moderate* action on the liver and skin; and their debilitating effects counteracted, as much as possible, by means which maintain the powers of the heart and brain. No practice could be more reprehensible, than that of prostrating the energies of a patient, already reduced by a fever of ten or twelve days' duration, by large doses of antimonial medicines, or irritating his system with a mercurial salivation. The great point is to stimulate and evacuate alternately, or at the same time, and every physician will make his own choice of means."

—

3. Ligature to the carotid Artery.—Dr. Maclay Awl, of Somerset, Ohio, has lately performed this operation on a child, ætat. twelve years, preparatory to the extirpation of a portion of the inferior maxillary bone, affected with osteo-sarcoma. We have before given our views of the impropriety of this *preparatory* measure, and the subsequent experience of surgeons have fully confirmed the correctness of our opinion; nevertheless we award to Dr. A. full measure of praise for his skill and dexterity, and we rejoice to see that skilful and scientific surgeons are to be found even in the most remote sections of our extensive territory.

—

4. Amputation.—Dr. Dubois, of Warren county, Ohio, "has recently ap-

plied to the thigh, the method of operating which is pursued in amputating the leg above the ancle joint, with a *single flap*. His object was to throw the entire cicatrix on the circumference of the stump; so that the weight of the body, when an artificial leg should be used, might rest upon the sound integuments. To this end he made, from a point on the outer side of the limb, a curved incision downwards and forwards; and, from a corresponding point on the inner side, another, causing the two to meet in front. He then dissected up a semicircular flap, and made his circular cut to the bone, immediately below the lateral points where his first incisions were begun. The operation was completed in the usual way, and the wound healed kindly by the first intention." The editors state they have examined the limb, and found the seam limited in its extent, smooth, firm, and quite on the margin of the stump; so that the object in view was perfectly accomplished.

5. Wound of the internal Jugular Vein.—Dr. Miller gives an account of a female who, in an attempt to destroy herself, inflicted, with a razor, five incisions, on the right side of the neck; the cavity of the larynx was not exposed, and the doctor says, "the internal jugular vein was *divided*, and *likewise* the *external coat* of the carotid artery." The hæmorrhage from the vein amounted to a gallon, and ceased from syncope; it was only necessary to apply sutures and compresses. In ten days after, hæmorrage recurred, and, upon examination, the incisions were found healed, with the exception of two small orifices, communicating with a "considerable *aneurismal cavity* over the large blood-vessels of the neck, filled with blood, partly coagulated." This hæmorrhage was *venous*, and compresses, &c. were again trusted to. In sixteen days, alarming *arterial* hæmorrhage occurred, "ulceration and sloughing had exposed the cavity of the aneurismal sac, and destroyed the coats of the carotid artery." A ligature was passed around the vessel below the tumour, the wound healed, and in a few weeks she was perfectly well.

The following are the concluding remarks of the reporter: "the case now submitted to the profession establishes the fact, that *wounds of the internal jugular vein are not necessarily fatal.* That vessel, having furnished two copious and alarming hæmorrhages, was permanently closed by a coagulum, without any detriment to the brain. *From this we conclude that tying up the internal jugular vein might be safely and successfully practised.*"

We are unable to ascertain how the doctor discovered that the *external coat* of the carotid was wounded; and if the internal jugular was *divided*, and the incision carried to a sufficient depth to wound the carotid, how did the par vagum nerve escape?

—

6. Cataract.—Dr. Wright mentions a case of cataract, occurring in a child affected with hooping-cough, which he attributes as the cause of its formation; he concludes, therefore, that "cataract may be produced, very naturally, by hooping-cough, either by inflammation sequent to general congestion of the head from coughing, or by a depravity of the sentient extremities of the nerves of the eye, relevant to the congestive condition of their cerebral ends."

—

7. Extirpation of a Tumour, originating from the sclerotica, by Dr. Warner. "It adhered to the adjacent parts of the sclerotica, from whence it extended to the half part of the cornea, towards the outer canthus, then passed loosely over to the inner canthus, and rested against the nose. The whole tumour passed downward as far as the *antrum highmorianum*.

"The upper eye-lid covered but a small part of the tumour, which was thinned, elevated, and considerably elongated. The lower lid was depressed."

From the description given of the tumour after its extirpation, it would seem to bear some resemblance to fungus Hematodes; but the circumstance

of the patient's *recovery* would lead us to a different conclusion. The eye was preserved sound.

—

8. Cesarian Operation.—In a note, it is stated that this operation has been successfully performed by Dr. John L. Richmond, of Hamilton county, Ohio; it is not mentioned that the child survived.

—

9. Iodine in strumous Ophthalmia.—Dr. Drake has successfully treated a case of scrofulous ophthalmia of two years standing, in a child aged six years, by the tincture of Iodine. The following is the formula. ℞ Iodine, 3j. dissolved in alcohol ℥iiss. The patient began with six drops, three times a day, and gradually increased the dose to twelve.

—

10. Cellular Inflammation.—Dr. Drake relates a case of diffuse cellular inflammation, subsequent to an attack of intermittent fever. Bretonneau's plan of treatment, by means of tight bandages, and Hutchinson's plan of making extensive incisions, were tried without success. The patient died.

—

11. Wound of Jejunum.—An account is given by Dr. Drake of the death of a man, from a lacerated wound of the intestinum Jejunum, the abdominal parietes remaining entire. Dr. D. asks the question, Had the precise nature of the internal injury been understood, as soon as the blow was inflicted, could any plan of treatment which it might have suggested, preserved the life of the patient? He then suggests that the following would, perhaps, be the most efficacious treatment: "1. To prohibit the patient from swallowing any thing. 2. By means of cathartic injections, promptly administered, to evacuate the lower bowels, before they should have lost their capacity for peristaltic motion. 3. To give a very large dose of opium, which would have the double effect of quieting the action of the bowels, and preventing inflammation by obtunding sensibility. 4. When inflammation should supervene, to resort to venesection, to cupping or leeching of the parietes of the abdomen, and, subsequently, to an extensive blister over the same part.

"By these means, the extravasation of the contents of the bowels would, as far as is practicable, be prevented; while the inflammation inseparable from such an accident might be kept in check, until a union of the lips of the wound, or their adhesion to the peritoneum of some contiguous part, should take place. If the injured part should slough away, reunion might still, perhaps, occur, though the case would be much less favourable to such a result, than cases of intussusception."

—

12. Fœtal Monstrosity.—Mr. W. E. Thomson gives an account of a case of this kind, which occurred in the practice of Dr. J. L. Houston, of Ky. The following is the description:

"The monster presented the union of two fœtuses. It had two perfect heads and two necks; but the right side of the body of one was blended with the left side of the other. There were two perfect arms, one on each side of this common trunk. A third arm issued from the median line of the trunk, behind, at the scapulæ, and had two hands attached to it. The lower extremities followed the same law. Each side had a leg and foot, and from the lower part of the trunk behind, there issued a third, or common leg, which, however, had but one foot, and that was imperfect. There were two spinal columns, one umbilicus, one anus, and one imperfect pudendum. Its weight was twelve pounds. It was still born. Unfortunately, no examination of the internal parts was permitted.

"The delivery of this monster was not attended with any particular difficulty. The feet presented. The mother recovered without any sinister symptoms."

The December number of this journal has never come to hand.

ANALYSIS

OF

FOREIGN JOURNALS.

ART. V. *Archives Generales de Medecine.* Paris, October, 1827.

1. FISTULA OF THE PAROTID GLAND AND STENONIAN DUCT. This article is a memoir by M. Mirault, upon the process of M. Deguise, as modified by M. Beclard. Three cases are stated, in order to exhibit the superiority of this method, over the common means for suppressing the external flow of saliva, through wounds and fistulous ulcers. Our limits admit of our inserting but one of them. The operation was completely successful. Auguste Gonoreau, aged eighteen, the clerk of a notary, lacerated his cheek by falling upon an iron stove. One of the upper screws penetrated the cheek, wounding the buccinator near the masseter; though it does not appear that it reached the mouth. The wound healed rapidly, with the exception of a small fistula through which there was a discharge of a clear liquid, especially while he was eating. This showed that the stenonian duct had been wounded. After having fruitlessly employed the several processes which were directed by his attending surgeon, on the 21st of May, 1821, he placed himself under the charge of Beclard, in *l'hopital de la Pitie.* It had been three years since he had received the injury.

Beclard converted the fistula into a recent wound, by the excision of its sides; then with a small trocar he perforated the cheek from the wound, passing the instrument obliquely backwards. Having withdrawn the stilette through the canula which remained in the perforation, he passed the end of a leaden wire. Having withdrawn the canula, he in the same manner made a second puncture; beginning, however, within the mouth, about three lines anterior to the former puncture, carrying the point of the instrument obliquely, till it passed into the wound near the place where the wire was inserted. The external end of the wire was passed through this opening into the mouth, being thus bent somewhat in the form of the letter V. The ends of the wire were twisted together; and the external wound was closed by a needle and the twisted suture. For the first three days, there was some distention and pain, owing to the saliva's not passing at first very readily by the side of the leaden wire. On the fifth day, the saliva passed freely into the mouth, and the swelling was nearly gone; the external wound had united, and the needle was now removed. Still, the internal fistula was not so complete as to carry off all the saliva, while the patient was eating. The duct was distended into a kind of sac, producing during his meals a small tumour, which was however, easily emptied into the mouth, by a very slight external pressure. The leaden wire remained inside the cheek, till it fell out, in September, when the cure was complete.

2. OBSERVATIONS UPON CEREBRAL CONGESTIONS IN CHILDREN, by M. Guibert. This is a continuation of an article which we noticed in our last number, page 171. Several cases are very handsomely reported, though they unfortunately throw but little additional light, either upon the pathology or treatment of this very interesting set of diseases.

3. ACUTE ŒDEMA WITH CUTANEOUS ECCHYMOSES, by M. Ollivier. Petechiæ,

vibices, eccymoses, &c. when they appear, are not always signs of a malignant state, in acute diseases; nor in chronic complaints, do they constantly mark that extreme atonic state of the system, which often attends sea scurvy and porphyra hæmorrhagica. The same is true of œdema of the hands and feet; and it is well known that anasarca, in the beginning, is frequently attended with a considerably entonic diathesis. The case which is reported in this article fully illustrates these points. A female child of three years of age, was affected with what the French physicians call a gastro-enteritis,* which was protracted for several weeks, attended with eccymoses on different parts of the body, and œdema of the hands and feet, and also of the eyelids. These external symptoms appeared and vanished several times during the progress of the disease. There were, besides, patches of urticaria, occasionally on several parts of the skin. After all, it was rather a mild case, and yielded, in time, to a very moderate practice of eccoprotics, demulcents, &c. From its resemblance to some cases, which have been reported as arising from eating some kinds of shell-fish, or from damaged provisions, we can hardly avoid suspecting that, by some means or other, the child had been fed with very improper food. This is merely a suggestion of our own.

4. History of three rare cases, by M. Richard Desbrus. Floreal Bertrand, a robust man, aged thirty-four, May 21, 1827, was beset by a swarm of bees, and so severely stung, that he died within fifteen minutes. He made his way into the house, said that he was dying, and threw himself upon a bed. M. Colemard de Lafayette arriving instantly, found him pale, breathing feebly with interrupted sighs; the pulse nearly gone, the skin cold. To assist respiration, M. Colemard attempted tracheotomy; but it was in vain, as he was already dying. The body was not examined after death. After some speculation upon the cause of death, M. Richard concludes, with much probability, that it was owing to the shock given to the brain and nervous system. [Quere—What might a very free and early employment, both externally and internally, of volatile alkali, or rather of ammoniated alcohol, have done in this case? We have known of two cases of sudden death, before the arrival of a physician, from the single sting of a bee; and one or two other cases have occurred, which threatened instant death, but the patients were speedily restored by volatile alkali, and the strongest stimulants that were at command. Laudanum in full doses, appeared to be a very useful auxiliary. The symptoms very exactly resembled those of Floreal Bertrand. The symptoms from the bite of venomous serpents, will also generally yield to a similar treatment.]

The second case is that of an excrescence arising from the glans penis, about an inch in diameter, and about two inches in length. It had the appearance and consistence of horn, and was the sequel of a very bad ulcer, (supposed not to be syphilitic,) of the prepuce and glans. Amputation of the penis was advised, but not executed at the time. Event not known. The third is a case of umbilical hernia, which burst spontaneously, leaving an opening through which the fæces afterwards passed, evacuations from the rectum, after a while, altogether ceasing. It seems that around the new opening, the muscles were capable of contracting, in some degree, under the control of the will, forming an imperfect sphincter.

5. Clinical researches tending to refute the opinion of M. Gall, concerning the functions of the cerebellum, and to prove that this organ presides over the acts of equilibration, standing, and progression, by M. Bouil-

* This gastro-enteritis is probably what is called in many parts of our country, child's fever, or infantile remittent. It generally yields *here* to daily purging with calomel, in divided doses. A few drops of laudanum, especially towards the close of the disease, are sometimes requisite to modify the action of the calomel, and to allay the irritation. Calomel is almost a specific, and the disease is rarely fatal, under its *proper* use.

lard. The title exhibits the scope of the article, and what the author considers as having accomplished. Several curious and interesting cases are detailed, which shed a considerable light upon the functions of the cerebellum, and upon the sound and the morbid anatomy of this organ. The speculations and theories of Messrs. Gall and Spurzheim, by calling the attention more particularly to the brain, have served to give a new spring to anatomy and physiology, which in the end will probably produce some important additions to our knowledge in these two essential branches of medical science.

6. SKETCH OF THE CLINICAL PRACTICE OF THE FACULTY OF MEDICINE, AND OF THE CIVIL HOSPITALS OF PARIS, by M. Ratier. Many of the most interesting and instructive articles of foreign journals, are the hospital reports, and the sketches of the private practice of eminent physicians. This report of M. Ratier is confined to the practice in *l'hopital des veneriens*, and gives a very lucid statement of the views and treatment of M. Cullerier, a physician of very extensive experience in this department of medicine. From the importance of the subject, and a wish to exhibit the latest and most improved practice in the Parisian hospitals, we are induced to make much more extensive extracts from this article, than are ordinarily admissible in the analysis of a foreign journal.

M. Cullerier is very attentive, punctual, and zealous, in the performance of his duties. Every day, in summer, he commences his visit at six, and in the winter at eight o'clock, in the morning. He is very careful to avoid a routine, which physicians are so apt to adopt, when they are attending a number of patients affected with a common disease. He observes with care, and modifies his practice to particular cases, and makes experiments in a rational and philosophical manner.

It is well known, that of late, there has been a great revolution in the doctrine of the venereal disease. A doctrine transmitted from age to age, and received without examination, is now questioned. We doubt, we examine, and we make experiments anew. The specific properties of mercury have been sharply attacked; the very existence of a peculiar venereal virus is even denied by an author, who though he as yet has only a small number of partisans, is still worthy of attention. In this conflict of opinions, M. Cullerier abstains from giving his sanction *officially* to either of the doctrines; being sensible that as his situation gives him great authority in these matters, it equally imposes on him the propriety of reserve and caution. It is his aim to view the disease, as if it were now presented to him for the first time. Besides, this method of doubting, and the desire of examining for himself, are not new to him. For a long time, and before the fact occurred to many, he had observed that diseases proceeding from impure connexion might be cured without mercury, and that diseases that are not venereal, will yield to mercurial treatment. These facts are the guides of his researches, observations, and experiments. It must be confessed, that M. Cullerier doubts the existence of a specific venereal virus; but, to prevent misapprehension, it is necessary to express myself with the utmost precision. He does not question, what experience every day proves, that morbid secretions act as irritants, and produce upon the parts which they touch, different forms of phlegmasia, at the same time giving rise to exhalations and secretions, whose result is equally irritating to sound parts. But, it appears to him that the actions and effects of these different products have not been sufficiently examined. He supposes, that they are not contagious in every case, and that the pus, for example, which flows from these ulcers, that are the consequence of the application of acrid matter, is simply irritant, and that it does not appear capable, as the pus of recent chancres, to produce primary symptoms [of syphilis.] Finally, in the actual state of things, it is not demonstrated that affections called venereal, can be produced and sustained by a virus, which, introduced by innoculation, acts

upon the economy, sometimes immediately, and at others at a more or less distant period. He considers science as far from being complete, and that a doctrine is no more solid, and no more real, because it is supported by its antiquity, and is sanctioned by imposing authority.

This fatal indolence of the human mind, which leads to belief without the trouble of examination, has had such a peculiar effect in establishing the doctrine of venereal complaints, that it has not been questioned till within the last twelve or fifteen years. The negligence of authors has been so great, that we possess not a single good description of syphilitic symptoms. When a student from the lectures is interrogated as to the character of a venereal chancre, he boldly gives the description of Hunter, that *it is a hollow ulcer, with a gray surface, of bad aspect with perpendicular edges, bleeding and painful.* But, after having assiduously attended a venereal hospital for three months, and making our observations, and noting the phenomena of the disease with the minutest care, we have met with the characteristics described by Hunter in but an extremely small number of primary venereal ulcers.

In most of the histories of syphilis, a crowd of symptoms are introduced which are foreign to the disease. We have often seen M. Cullerier regard as simple affections those which in other hospitals are considered as syphilitic, and are there treated with mercury. His practice accords with his theory, and instead of the empirical treatment employed by his predecessors, he has substituted a rational practice, the results of which are such as to encourage his perseverance. Though M. Cullerier avoids the constant employment of mercury in every case, he does not absolutely renounce it. He believes it to be an energetic remedy, sometimes useful, but dangerous in certain cases. He limits its employment to *the general rules of therapeutics*, and thus has rendered an essential service to medicine. Good practice in other ulcers equally severe, is good practice in those of syphilis.

The inflammations of the different tissus produced by the venereal virus, (so called,) are in the same situations as those which arise from the vaccine or variolous virus. They are influenced in their progress, duration, and termination, by different modifying causes, which act upon the economy. This truth M. Cullerier frequently enforces upon his auditors, and he demonstrates it to them. The antiphlogistic treatment, local excitants and astringents, modify them very sensibly. The moral affections, and the state of the digestive organs, equally produce remarkable changes. Thus we have often seen chancres, buboes, gonorrhea, and orchitis, sensibly meliorated in a very rapid manner, by bleeding, emollients, narcotics, astringents, and by all the means with which we are accustomed to combat inflammations which arise without any specific cause. We have seen extensive chancres with phymosis, upon the patient's receiving some very afflicting intelligence, suddenly assume the terrible aspect of an hospital ulcer. Similar phenomena are observable upon an injudicious change of regimen.

From the facts which are continually passing before us, we are obliged to allow, that primary venereal affections are perfectly cured by a simple treatment; not as the physicians of the old school assert, by leeches and demulcents alone; but, by that combination of means, which a wise and experienced physician would employ in other inflammations, according to their form, duration, intensity, &c.

Such is the methodical and rational treatment, which M. Cullerier employs in the different affections, which have been grouped together under the name of the venereal disease, in lieu of the indiscriminate and empirical practice by mercury. He uses general and local bleedings, emollient, narcotic, and astringent applications; and according to the different morbid states which he has to combat, caustics, tepid bath, vapour bath, diluting drinks, rest, and an appropriate regimen. If mercurials are sometimes employed externally, it is as stimulants, and not that they excite a specific action. Diet occupies an important station. Venesection, which formerly

preceded the mercurial treatment, he considers as a part of the ancient and common routine, and reserves it for cases of an intense plethoric or febrile state, as in double buboes which are very large and much inflamed, and in orchitis following a sudden suppression of gonorrhea. In *these* cases, he reaps a great advantage from bleeding, and practises it more freely than in any hospital which we have frequented. His least bleedings are from eighteen to twenty ounces, and sometimes twice that quantity. He frequently employs leeches for local bleedings, in both acute and chronic inflammations. In the former, he places them *near* the diseased parts; in the latter, he often applies them to the parts themselves. Many a time have we seen obstinate ulcers, that have resisted mercurial applications, and repeated caustics, very essentially meliorated under repeated local bleedings. He disapproves of leeches to parts that are much inflamed, as being liable to produce gangrene, and bad ulcers.

Baths are an essential part of the practice of M. Cullerier. He makes use of opium in form of fomentation, lotion, and injection; and he employs it internally for mitigating pain. He finds that this remedy frequently removes both primary and secondary symptoms, which are considered as syphilitic.

Such is the outline of M. Cullerier's non-mercurial practice. He has cases, however, in which he employs mercury freely, both externally and internally. When he has recourse to this medicine, we perceive nothing very peculiar in his plan, or any essential variation from the rules which are observed by all good and cautious practitioners. It is agreed, that secondary symptoms sometimes supervene after an apparent cure by the non-mercurial practice; and the same is allowed to be occasionally the fact, after the mercurial treatment; but it is contended that they are much milder and more managable among M. Cullerier's patients, than among those who were at first put under a mercurial course.

M. Ratier's report is very ably and lucidly drawn up, and we very much regret that our limited space has obliged us to give a sketch of it, in such a very mutilated and shattered condition.

DEPARTMENT OF FOREIGN MEDICINE.

7. MALCONFORMATION OF FEMALE ORGANS OF GENERATION, by professor Rossi of Turin. The first case is one in which there was an *entire* absence of the exterior organs of generation. From the rectum to the uterus there was a very small obscure duct, through which the patient had been impregnated. An artificial opening was made at the proper place during the labour, through which she was successfully delivered—and through which she again became impregnated. The second case is an absence of the vagina, a very narrow canal being found in its stead. She also became impregnated, and was delivered by an operation similar to that of the former case. The third is a case in which the vagina was simply obliterated, and was restored by an operation.

VARIETIES.

9. *Royal Academy of the Sciences, Sept.* 25, 1827. M. Magendie made a report upon M. Breschet's memoir upon the *false secondary* (consecutif) *aneurism of the heart.* The injury described by M. Breschet is a kind of rent which is formed in the parieties of the heart, in certain places of the left ventricle, but more especially at its extremity. The blood, penetrating this opening, passes to the enveloping membranes, and thus forms *upon the surface* of the organ, a tumour as voluminous as the heart itself. The blood coagulates in this kind of sac, and is deposited in several layers of some lines in thickness. Thus, though the heart is really torn or perforated, it is

so protected by the surrounding membranes, that life is not immediately extinguished. Talma the actor had this disease of the heart. According to M. Breschet, the diagnostics are as follows. At the access of the complaint, the patient perceives the sensation of a warm liquid running in the left breast. To this symptom, which rarely continues long, there succeed an oppression of respiration and a palpitation, so that it seems as if a body is moved towards the region of the stomach, or even lower; there is pain in the præcordia; hard and deep pulsations in the epigastrium, and towards the diaphragm a little to the left; at times, suffocation, and respiration oppressed and interrupted; the pulse small, contracted, weak and frequent; or full, hard, and occasionally intermittent. The progress of this affection is slow and gradual; many times, the tumour remains several years without being ruptured; indeed, a rupture of it is rare.

10. CURVATURE OF THE SPINE. Six cases are stated, as treated by M. Bretonneau, according to the process of M. Maisonabe. As we have not by us the account of the peculiarities of Maisonabe's treatment, we must defer noticing the cases, though they are very interesting, and were either cured or very essentially mitigated. [The sketch of Bretonneau's application of Maisonabe's principles is said to be in the Archives for August, a number which either has not come to hand or is mislaid.]

11. BIBLIOGRAPHY. M. Monfalcon has published *a summary of medical bibliography*, in 18mo. A manual of this kind is much needed in the English language. M. Emangard has published *a practical treatise upon croup*. In his treatment he principally relies upon *local bleeding, carried to paleness*, which he considers as the true specific in the access of the disease. Duncan's *New Edinburgh Dispensatory*, with all the late improvements in pharmacy, has lately been published at Paris.

12. TARTAR EMETIC IN LARGE DOSES IN PNEUMONIA. In our last number, page 171, we mentioned the employment of this article by M. Guersent; we now notice some facts on the other side, which show that the question is far from being settled among the Parisian practitioners. M. Chomel of *l'hospital de la Charitie*, finding the pneumonia, of February and March, 1827, obstinate, and yielding with difficulty to the usual antiphlogistic method, made several trials of tartar emetic in large doses; in the same cases, he did not omit free bleeding with the lancet and leeches, with blisters to the chest and extremities. The result was very unsatisfactory to him and his colleagues, as well as to M. Ratier the reporter. Nor was he more successful with large doses of tartar emetic in rheumatism. It is true, that it may sometimes be given in doses of ten or twelve grains without producing emesis or catharsis. M. Chomel thinks that such strong impressions, for the purpose of making a revulsion, though sometimes successful, are hazardous; and when they are resorted to, that they should rather be made upon an organ or part, that is not essential to life. These large doses of antimony, however, are said to be much more efficacious in pneumonia, when they excite active vomiting and purging. Large doses of nitre are also disapproved.

13. COMPRESSION IN INFLAMMATIONS OF THE JOINTS, by M. Varlez, of Brussels. Four cases are reported of the success of tight bandages in arthritic affections. They all were sequels of acute diseases, as pneumonia, dysentery, &c. It is very questionable, whether this method would be of any permanent service in idiopathic acute rheumatism.

14. *Royal Academy of Medicine, May* 1. SECRET REMEDIES. M. Husson read the report of M. Itard. From 1825, sixty of these remedies had been examined by the Academy; and of this number, three only were approved; two of them were cosmetics, and one an odontalgic. Were not the fact observed every day, it would be incredible, that at the present time, the public should submit to such a barefaced imposition, as quack medicines, in which but one in twenty is worthy of notice, or rather of approbation.

15. EPSOM SALTS IN DYSENTERY. In the department of Indre-et-Loire, in 1826, a dysentery prevailed, which was treated very successfully by M. Bretonneau, by free and repeated cathartics of epsom salts.

16. ENCYSTED HYDROCELE OF THE CORD CURED BY TOPICAL STIMULANTS, by Brodie. M. —— brought to me his son, a boy of ten years of age, who was supposed to be affected with a hernia, for which a truss had been recommended. This pretended hernia was nothing else than a very movable encysted tumour, which could even be crowded through the inguinal ring. However, it remained naturally without the ring, not penetrating into the abdominal cavity. I prescribed lotions of the hydrochlorate of ammonia dissolved in alcohol, and distilled vinegar. This application was continued three months, at the end of which time the tumour had entirely disappeared. This was eight years ago, and there has been no relapse.

17. FUNCTIONS OF THE NERVES. In the work which I propose soon to publish, I shall endeavour to maintain the following doctrine: 1st. The action of the nervous and muscular systems, on the one part, is the result of the movements caused in the different parts of these systems, by the fluid diffused through all nature, of which caloric, light, electricity, galvinism, and magnetism, are only modes of a peculiar action; and on the other part, of organization and of the physical and chemical properties of the nervous and muscular organs, which render them susceptible of the movements which are impressed on them.

2dly. The principle of sensation and motion have no peculiar seat in any human organ; but this principle of an unknown nature, in contradiction to the essential properties of matter, correspond to all parts of the body; the perception by it of certain organic nervous movements constitutes sensation; while the movements which it impresses in its turn upon the imponderable fluid contained in the muscles, produce muscular contraction.

3dly. In fine, what we are to understand by nerves of sensation and nerves of motion. RICHARD DE VAUX.

18. SYPHILITIC VIRUS A SPECIFIC POISON. M. Martin Solon observes, it is difficult to believe, that syphilitic maladies are the same as simple inflammation, since we see, (having had a very recent example,) a child born of syphilitic parents, many months after its birth and separation from its parents, exhibit decidedly syphilitic aphthæ in its mouth, these aphthæ communicating chancres to the nipple of the nurse, and these symptoms yielding to a mercurial treatment. Certainly, pneumonia, opthalmia, and enteritis, are not transmitted and communicated, or excited in this manner.

19. SPECIFIC ACTION OF ANTIMONY IN PNEUMONIA AND RHEUMATISM. M. Trousseau is as decided in his opinion of the specification of large doses of tartar emetic and kermes mineral, in curing or mitigating the symptoms of pneumonia and rheumatism, as M. Chomel and his reporter M. Ratier, whose ideas we have stated, are in the opposite sentiment.

[In thus giving, in the same number of their journal, the various and opposite views of authors and practitioners, upon the unsettled and contested questions concerning antimony and mercury, and some of the most prominent diseases in which they are employed, the editors of the *Archives* exhibit to the literary, scientific, and medical world, a striking example of fidelity, candour, and impartiality, highly worthy of the imitation of all cotemporary journals. Every reader is furnished with the facts and arguments, fairly expressed, from which he can make his own unbiassed inferences and conclusions.]

20. COLOUR OF THE COATS OF THE ARTERIES AND VEINS IN DEAD BODIES. It is now well understood, that in the study of morbid anatomy, much caution is often necessary, to distinguish the phenomena which belong to the cause and nature of the disease, from those which are its consequences, and even from those which, in certain circumstances, are produced by death

itself. It is also agreed, that in cases of death from hemorrhage, there is frequently found a distention of the minute vessels of the brain, which, to a superficial observer, might be considered as evidence of previous inflammation. In a very able memoir by Messrs. Trousseau and Rigot they show that in animals which have died of typhoid diseases, the coats of the arteries and veins are occasionally coloured or tinged by the blood after death, and that in some instances, this appearance is liable to be mistaken for a sign of general inflammation. Their experiments and dissections were made upon horses. We are unable to say, how far this analogy will hold in the human subject.

21. BLISTERS TO THE PERINÆUM IN GLEET. M. Malenfant relates four cases of complete success in obstinate gleets, from blisters applied to the perinæum. The blister is kept open, and the discharge from it generally continued two or three weeks.

22. EFFECTS OF NARCOTICS ON LEECHES. M. Melier relates a case of severe narcotic symptoms, from an enema made of a decoction of the green heads of poppies. By leeches to the temples and epigastrium, acidulous drinks and enemata, pediluvium, irritating applications to the hands, &c. the patient was restored. What is most remarkable is, that the leeches very soon let go their hold, and fell off dead. This circumstance has been noticed in other analogous cases, and proves, that certain poisonous substances penetrate very rapidly through the whole animal economy, and, as the author conceives, act principally on the blood.

ART. II. *Archives Generales.* November, 1827.

1. RUPTURE OF THE VAGINA. M. Desgranges has a very interesting article upon the fœtus being found in the cavity of the abdomen. He details six cases, extracted from different respectable authors, in which the body of the uterus was entire, and the fœtus had escaped during labour into the cavity of the abdomen, through a rupture of that part of the vagina which is next the os tinæ. In five of these cases the rupture was fatal.

2. TREMORS, A SEQUEL OF THE MERCURIAL TREATMENT. M. Colson has an essay upon this subject, in which we perceive nothing very materially different from the views and practice of several approved authors, who have written upon mercury.

3. MONSTROSITY OF INCLUSION—that is, of a fœtus or parts of a fœtus found within another fœtus, or in such parts of the human body as they could have never reached from the uterus, and indeed occasionally in males and other subjects that never could have been impregnated. M. Ollivier in a very able memoir relates several well attested cases of this kind of monstrosity.

4. CASES OF CLINICAL PRACTICE. These are cases *a la clinique de perfectionment*, treated by M. Guersent. They do not admit of abridgment, and are not of sufficient rarity to induce us to transcribe them, though they are very properly recorded in the *Archives*.

5. HOSPITALS AND CHARITABLE INSTITUTIONS OF ENGLAND. M. Billard has visited England, and on his return made this report, which appears to be very able, and as far as we can judge, impartial and void of national prejudice.

6. LIGATURES TO THE LIMBS IN CERTAIN INTERMITTENT DISEASES. M. Bourgery has the following directions for their employment. "In order that ligatures may cure an intermittent, they ought to be used *at the very access* of the cold stage, while the patient, as yet, is only *beginning* to be indis-

posed, and is but slightly chilled. They are applied to the upper part of the limbs, the band being wound twice around, so as to stop the circulation of the superficial veins, and somewhat to embarrass the arteries and the deeper veins."

The stopping or materially embarrassing the circulation, in the four great limbs of the body at once, has such an effect upon the system, and often produces such a shock, as to require much caution and management. M. Bourgery recommends their employment in the following diseases. Intermittent fevers, paroxysms of suffocation from chronic affections of the lungs, some kinds of apoplexy, and in fainting which arises from a plethory of the heart. To be of much service, they must be applied at the very access of the paroxysm of these different complaints.

7. Traumatic delirium. M. Helis relates several cases at the *Hotel-Dieu*, of a nervous delirium supervening upon surgical operations. It appears to have been easily managed by opium, and not to have required very large doses of it.

9. Removal of the upper extremity of the os humeri. Sept. 19, M. Yvan reported to the Royal Academy of Medicine, an operation performed by M. Regnaud, a surgeon of Toulon. "The patient had been wounded by two balls, one having penetrated the upper part of the shoulder, had carried away the inner edge of the acromion, crushed the head of the humerus and a portion of the bone, passed out through the deltoid muscle, after having lacerated a portion of the great pectoral; the other had penetrated through the posterior part of the shoulder, and had gone out under the inferior angle of the shoulder blade, without having broken that bone. The operator began by connecting the two openings of the anterior wounds, by an incision which he prolonged to the vicinity of the insertion of the tendon of the deltoid muscle; he then freely opened the capsule, cut the tendons of the subscapullary, biceps, supra and infraspinatus, and small round muscles, removed the splinters, and caused the superior extremity of the humerus to be carried upward and inward; then a piece of pasteboard was slipped between the bone and the flesh, and the humerus was sawed off about an inch below its neck. The wound cicatrized in about three months; the extremity of the humerus was then about fifteen lines distant from the glenoid cavity; but by little and little the muscular contractions brought it near the coracoid apophysis, where it contracted some adhesions; there, a new articulation was formed in eight or nine months, and at this time the patient can move the limb in every direction."

10. Indurations of the axillary lymphatic glands in cancers of the breasts. M. Lisfranc considers, that these engorgements which appear near a cancerous tumour, are very far from being always of a cancerous nature themselves.

11. Mortal hemorrhage from leeches. In *La Pietie*, a woman affected with a simple ulcer and a gastro-enteritis, had thirty leeches applied over the epigastrium. At first, the bleeding was moderate and easily ceased; but three days after, the punctures burst open in the night, and in the morning she was found dead, drenched in blood.

12. Amputation of the hip joint. M. Roux related an unsuccessful case of this operation, in consequence of a fungous tumour in the upper part of the thigh. He also related a case of similar disease in the shoulder, in which a part of the clavicle and of the shoulder blade were removed, (and it seems, the whole arm.) We infer, that it was successful, as no mention is made of any fatal or alarming consequence.

14. Lithotomy. M. Souberbelle presented to the academy a man seventy years of age, on whom he had twice performed the operation of lithotomy, in eighteen months. The first time, by the lateral operation, he removed fourteen calculi; the second time, he removed a small calculus, by the *super-pubian* operation.

15. Amputation of the collum uteri. M. Lisfranc has of late twice successfully performed this operation. One of these women conceived within a fortnight after the operation, and at the end of her term was delivered without difficulty. Within three months, she again became pregnant.

16. Strangulated hernia. M. Potain has lately operated with success, in a case of strangulated hernia, in an infant of only three months old.

17. Chloruret of lime and of soda. Dr. Cazenave of Cadillac has lately employed these articles successfully in syphilitic ulcers; and he has also found them to be very serviceable internally, in several obstinate cases which had resisted the usual means.

18. Ergot. This article has of late excited considerable attention in Europe. M. Villenave has published a volume upon its effect in accelerating delivery.

19. Medical Polemics. M. Chervin's voluminous report concerning the yellow fever, and the report of the commissioners who were sent to Barcelona to investigate the causes and nature of that disease, continued to excite much debating, and many conflicting opinions, at almost every session of the Royal Academy of Medicine.

20. The broussaisian controversy is still conducted with much warmth, between the younger Broussais and M. Roche on the one hand, and M. Miquel and M. Bosquet on the other.

Archives Generales. December, 1827.

1. Mental alienation. M. Georget in an uncommonly able and lucid manner, treats upon that description of monomania which produces an irresistible disposition to self-destruction or to other kinds of homicide. As it occupies fifty-eight pages of the Archives, no abridgment of ours, consistent with our limits, would do it any kind of justice. We all must recollect the case of James Hadfield, who discharged a pistol over the head of George the Third, at the Theatre. He was justly acquitted, on the ground of his being a maniac; and Lord Erskine's speech in his defence is one of the clearest expositions of doubtful insanity, that is any where to be found. As we ourselves have always felt a considerable interest in the unfortunate Hadfield, we were pleased at finding the following notice of him, which M. Gorget has extracted from the report of M. Billard, who has lately visited the English hospitals. After mentioning, that there is a particular department in Bedlam, allotted to those maniacs who had escaped capital punishment, on account of their insanity, he observes—"One of those detained here is Hadfield, about sixty years of age, small, lean, speaking with vivacity, remarkable for the mobility of his physiognomy, which many scars received in battle render still more singular, who thirty years ago, at the theatre, discharged a pistol at king George, though the ball passed over him. It being proved that Hadfield was in a state of mental alienation, though he had manifested but few symptoms of it, the jury acquitted him, and he was confined for life. He is now in that part of Bedlam which is occupied by persons of the same description. His air is frank and his manners polite.

He has embellished his cell with a thousand objects, whose form and original disposition denote him to be a man who is able and industrious, in inventing every thing that can beguile the tediousness of his captivity. He is quick and passionate, yet he is never disorderly, and he tranquilly submits to every thing. From the time that he committed his crime to the present, he has scarcely given any sign of madness: but some years since, without any

known cause, he suddenly became so furious, that his attendants were obliged to bind and confine him. This was, however, of a short continuance, and was followed by the healthy condition in which he still remains."

2. MONSTROSITY OF INCLUSION. This is the second part of M. Olivier's memoir, the first of which appeared in the Archives of November.

3. CEREBRAL MALADIES. M. Treusseau, in a dissertation of twenty-two pages, treats of a cerebral disease which is most frequently characterized by a general though incomplete paralysis, complicated with an apyretic delirium. He considers it as incurable, and that it is attended with a chronic inflammation of the meninges, and frequently of the cortical part of the brain, which produces delirium and paralysis. Ten cases are stated in most of which there was a considerable exaltation of mind, the patients considering themselves to be possessed of great wealth, or to be kings or emperors. The chronic inflammation was proved by the appearances upon dissection.

4. FOREIGN MEDICINE. Several cases of amputation of a part of the lower jaw, by Mr. Cusac of Dublin, and one by Mr. Wardrop of London, are detailed; and there *is* a notice of Dr. Turner's means of ascertaining the presence of antimony in different liquids. See Med. Rec. No. 40, page 401.

5. LITHONTRITIA. M. Lisfranc, Nov. 13, reported to the surgical *section*, two successful cases of lithontritia by M. Civiale. In the first case, a child of seven years old, M. Civiale, after having first introduced some flexible bougies into the urethra, was able easily to operate with a lithontritor of two lines in diameter. The second patient was a man of sixty years of age, who had been operated upon twelve years before, and had had a stone extracted by lithotomy. He had now laboured under the complaint again for fifteen months. He was relieved, and the stone entirely removed at five sittings *

Gazette de Sante, for November, October, and December. *Paris*, 1827.

1. PRACTICAL MEDICINE. "The following case, published in the last number of the *Journal of Agriculture and Medicine* of the department of Eure, has appeared to us [Gaz. de Sante] sufficiently remarkable to be here reinserted. The author at first treated a pneumonia by venesection, leeches, and the whole antiphlogistic regimen. He saw it grow worse and complicated; after each bleeding new symptoms arose, which he regards as signs of cerebral congestion and gastritis, then of a pleurisy. Pursuing the irritation under all its forms, by venesection, leeches, and diet, he sees it pass into a chronic state, and then degenerate into a dropsy, without perceiving that this must be the inevitable results of a debilitating treatment, so active and so protracted. We observe, that during the course of this treatment, the bleedings are almost always followed by an exasperation of the symptoms; that there is no real relief except after the use of blisters, purgatives, and *kermetized lohochs;* and that finally, the patient having arrived at the last degree of marasmus, and in a state of general dropsy, was only restored by nitre in a large dose, chrystals of tartar, frictions with tincture of squill, and digitalis purpurea, and probably by a tonic regimen; for by this time, it was discovered that the dropsy was evidently passive.

Though the case ought perhaps to bear another title, we will leave it the following;

Case of fluxion of the chest, (pneumonia) *complicated with inflammation of*

---

* As this number of the *Archives* is principally taken up with three or four very long dissertations, though they are upon interesting topics, we find very little in it suitable to be extracted in our analysis.

the stomach, with congestion of the brain, then with pleurisy; migration from an acute to a chronic state; colliquative diarrhea, marasmus, puriform expectoration, effusion of water into the chest, in the abdomen; finally, general dropsy;—cure. By Hippolitus Peter Deborville, M. D. of Putanges." We presume, the title of this case, with the prefatory remarks of the editors of the *Gazette de Sante*, will suffice for our readers.

2. Sulphate of quinine externally. "M. Martin, the younger, has applied sulphate of quinine to surfaces which have been blistered, in intermittents. He has not failed of success in either of the six cases which he has published. The first case relates to a woman of thirty years of age, who for four months had been harrassed with an intermittent quotidian. Two applications of the sulphate of quinine to the surface of a blister, were sufficient to produce a complete cure. But, after the first dressing, there supervened violent pains in the arm that was blistered; after the second, all the surface of the blister was covered with an eschar of half a line in thickness. These symptoms of a violent inflammation yielded easily to the employment of emollient cataplasms, and cerate for the dressing. In the second subject, the symptoms of inflammation were so severe as to suspend this mode of administering the sulphate of quinine. M. Martin was obliged to give the medicine internally, to obtain a cure of the fever, which ended after a treatment of twelve days. The third case was remarkable for the absence of all inflammation. The sulphate of quinine, instead of being applied in powder over the surface of the sore, was incorporated with the cerate for dressing the blister. In the fourth, the medicine was applied five times unsuccessfully over an old blister; but upon making a new blister, two dressings only were sufficient to effect a cure. Finally, the last subject was a case of quartan, of three months continuance. After two dressings the patient was completely cured."

3. Tinea contagious. "In one of the clinical lectures at *the hospital of infants*, M. Guersent has communicated the following fact, which appears to us quite worthy of remark, especially at a time in which some sceptical spirits are formally denying the existence of the various kinds of virus. A young girl affected with tinea (*teigne faveuse*) was admitted into a boarding school at Paris. During her abode, which was scarcely a month, she at first communicated the disease to an under mistress, then to a domestic, and finally, to six fellow boarders in succession. The fear of seeing this affection multiply still more, caused her to be dismissed as the focus of contagion." [We could mention several cases equally in point, to prove the contagiousness of tinea, and of several other affections of the skin.—Eds. Rec.]

4. Changes in the population of Paris.—In 1826, there were 29,790 births, of which 10,502, or more than a third, were illegitimate!!! Of the births, 15,187 were boys, and 14,783 were girls. Marriages, 7,755; deaths, 25,341—12,562 males, and 12,779 females. Upwards of 5,000 of the deaths were of consumption, and more than a fourth part of all the deaths among the adults were of this disease. The mortality of 1826 was less by 1,552 than in 1825, and the births of 1826 were more numerous by 717 than in 1825. Suicides in 1826, 357.

5. Gastralgies and Neuralgies; or nervous diseases of the stomach and intestines, in distinction from gastritis and enteritis. M. Barras has lately published a second edition of his treatise upon this subject. In a review, or rather a bibliographical notice, of this work, M. Miquel has the following preliminary remarks.

"A profound thinker has said, that nothing is worse than the corruption of that which is excellent. *Corruptio optimi pessima.* This thought perfectly applies to the subject which is treated by M. Barras. It cannot be denied, and we have not been the last to avow it, that one of the good things, the best perhaps which is found in the new doctrine, in the description of chronic gastritis, and the legitimate appreciation of the symptoms which characterize

it, and of the mode of treatment which it is proper to oppose to it. This disease has been better known, better observed, and better treated, since the first labours of M. Broussais. In this respect, the sentiment is unanimous; but such is the pertinacious influence of the spirit of system, that it corrupts and distorts the most precious results of observation System occasionally exhibits some useful truths, in restricting them within just limits; at other times it possesses itself of them in order to extend them beyond all bounds. It wishes to usurp all, and to confound all within the same sphere. In proportion as inflammations are sought and perceived in the stomach and intestines, it is not wished that any thing else should be seen in them. All the anomalies of sensibility, motility, and assimilation, have disappeared before the disturbances of the capillary circulation, and the nerves have been, so to speak, set aside, as subaltern agents, or humble supernumeraries.

"As system always speaks louder than observation, indolent and superficial minds suffer themselves to be captivated by it. From the benches of the schools, the infatuation has passed into private families; and the phantom of gastritis is seated at the table of our sybarites In some houses of the capital, wine is no longer drank, because it produces gastritis; and M Barras relates, that a physician made a great complaint of the waiter at a coffee-house, for his having to his sweetened water added some drops of Orange-flower water, which could not fail, he said, of renewing his chronic gastritis.

"Before the revolution, all the world had the vapours; under the consulate and the empire, the work of Corvisart caused an epidemic of diseases of the heart; since the restoration, we are afflicted with chronic gastritis. Have you a red tongue, and an insatiable appetite? It is a chronic gastritis; Are you sad and melancholic? Chronic gastritis; Are you constipated? Chronic gastritis; Have you a diarrhea? Chronic gastritis. It is impossible to escape this universal malady; it is the *Croquemitaine* of the *physiological medicine.*"

[We shall pursue M. Miqel no farther, and shall only remark, that the distinctions of M. Barras, judging from the specimens, appear to be very accurate; and we entirely agree, that a discrimination between merely nervous affections and inflammations, whether chronic or acute, is of the highest importance in therapeutics, and that their confusion is always productive of serious, and often of fatal consequences. We are ever happy to see these important points of Diagnosis faithfully and accurately discussed. Though we wish to take no active part in the controversy, and think that some part of the warmth of feeling might be spared, we have little doubt that the science of medicine will be improved by it, and that a more just and correct system of pathology, in the end, will be the result.]

6. Sulphate of Quinine.—M Lecointe observes, that this article, when given in pills, frequently fails of producing its effect, and that the pills sometimes pass whole through the bowels. In solution, or in powder, it operates more speedily, and in less quantities, than in the form of pill.

7. Sulphuret of Potass in Lead Colic.—M. Bayer has employed internally, the waters of Enghien in the early stages of colica pictonum. Five grains of sulphuret of potass dissolved in two pounds of water, answer as a substitute for the waters of Enghien. He states that this treatment frequently removes the symptoms of colic; though he follows this method by cathartics of jalap, scamony, sena, castor-oil, &c. He also has frequently recourse to opium.

8. Vaccination in Turkey.—In May, 1827, M. Auban, a French physician, vaccinated, in the Seraglio of the Grand Seignor, the young sultan aged seven years, two princesses under two years old, and two young ladies of the harem. See page 327 of this number.

9. Yellow Fever.—The debates of the Academy upon this inexhaustible subject were finally closed Nov. 6, 1827. The documents of M. Chervin, re-

port of the commission to Barcelona, &c. were referred to a special committee.

10. Death of M. Desaugiers.—This eminent surgeon lately expired, immediately after having had the operation of lithotomy performed on him. During the operation the seat of the pain was in the kidneys. It soon became excessive, and a sense of suffocation supervened. Death shortly followed. On examining the body, the operation was found to have been very accurately performed; but the kidnies were in an extremely disordered state, being filled with a black shapeless mass, resembling the lees of wine, or rather the spleen, bruised and gorged with blood. The immediate cause of death was the rupture of one of these masses, and the effusion of several pounds of blood into the right hypochondrium. This rupture must have taken place during the operation.

Art. IX. *Gemeinsame deutsche Zeitschrift für Geburtskunde.*—Vol. i. No. 1. Wiemar, Prussia, 1826.

1. Poisoning with Opium.—Professor d'Outrepont's case of a pregnant woman who attempted to poison herself with opium.

N. N. aged thirty-two years, mother of two healthy children, in her eighth month of pregnancy, lived, in consequence of her fickleness, very unhappily in her family. From the fear of receiving a just reproach on a future day, from her husband, for the *result* of her conduct, she resolved to destroy her life with opium. Her husband dealt *with* this article, and had just received a large quantity, which he placed upon a stove to dry. In the night, N. N. swallowed about seven or eight ounces, then sent for two of her female friends and her husband, to take a final leave. The professor did not see her till an hour after she had taken the opium, at which time the poisonous effect had manifested itself. The woman, who usually had a strong blush in her face, was now pale, the eye-lids prolapsed, pupils in a fixed state before a strong light, the skin of her whole body was cold to the touch, and so insensible that strong pinching and punctures with a pin were not noticed. Dyspnœa, great relaxation of the muscles, and loss of the power of motion in the extremities and lower jaw; senses of smell, taste, and hearing were scarcely extant; great difficulty in swallowing, which proceeded more from the want of power in the muscles of the throat, than a spasmodic constriction. Notwithstanding the large quantity of opium that was taken, it did not yet produce sleep. The woman related, in a connected manner, the reason why she intended to poison herself, and also the probable quantity of opium which she had taken. She did not express any regret for what she had done; enjoyed the most happy feeling, and wished to spend many hours yet in that state, before her decease. The stomach appeared distended, and painful to the touch; the parietes of the abdomen, and particularly the uterus, in such a relaxed state, that the form and position of the child could be distinctly felt. Six grains of tartarized antimony were dissolved in six ounces of water, and the solution mixed with one ounce of syrup of squills; one third was given the first dose, which produced copious vomiting in five minutes, by which lumps of opium, of the size of hazelnuts, were brought up. The medicine was repeated, and its operation encouraged by large draughts of warm water, in which a quantity of butter had been dissolved. It was presumed, that the second vomiting brought at least three ounces of opium from the stomach. The patient now fell into a deep sleep, from which she was only roused by the efforts of vomiting, friction, loud conversation, strong smelling spirits, elevation of the eye-lids and placing a strong light before

her eyes. By these means she was kept half awake, at length she became more sensible, and complained of a violent burning pain in the stomach. The vomiting was kept up by the draught only until the stomach was completely evacuated, after which, an acidulated draught was given, that remained on the stomach.

The evacuated contents of the stomach were collected and filtered, and that which remained on the filtering apparatus, carefully dried The mass, when dry, weighed six ounces (the author does not say whether it consisted of opium only).

The natural functions of the patient's system were gradually restored; but were soon followed by such a powerful re-action that strong symptoms of phrenitis came on, and such powerful motions of the child were observed, that it was presumed to be afflicted with convulsions. The inflammatory symptoms were subdued by abstracting, at three different times, thirty ounces of blood, the application of leeches and cold to the nape of the neck, and the evacuation of the bowels by clysters of vinegar and water. This treatment produced a remission on the second day, which rendered the further evacuation of blood unnecessary. Patient took a grain of calomel every two hours, which she bore well; cold applications and vinegar clysters continued. The following evening she had a strong exacerbation, from which she was relieved by the free evacuation from her bowels, and twelve ounces of blood. The patient is getting better, but the convulsive motion of the child continues. On the third evening after she had taken the opium, she was prematurely delivered of her child. The child had a purple appearance, and by convulsions died ten minutes after it was born.

On dissection it was discovered that the child was well formed, but the brain and spinal marrow were in a high state of inflammation. The inferences which our author drew from this circumstance are highly interesting; but we are obliged to omit them for want of room.

—

2. Cesarian Section, performed by Dr d'Beauclair.—The child was found dead in the uterus, and the woman died on the third day after the operation.

—

3. Laceration of the Stomach, *during parturition*.—Doctor d'Beauclair relates a case of a lying-in woman, who died on the fifth day after delivery, with all the usual symptoms of peritonitis. Thirty hours after her decease, the body was opened, and a laceration was found, four inches in length, in the lesser curvature of the stomach. The edges of the laceration were highly inflamed, and in a state of gangrene.

—

4. Extraordinary Precocity of a female child. This case is related by professor d'Outrepont. Barbara Eckhoffer was born of healthy parents in 1806, and when she was eleven years and two months old, died of a fever, having previously enjoyed the best health from her birth. When fourteen days old, she had four teeth, and was observed to grow astonishingly fast; at seven months she could walk; her hair had changed from flaxen to brown, and was so long as to reach the middle of her back. When nine months old, the common signs of puberty were manifest. After an attack of diarrhœa, the catamenia appeared, and continued regularly during life. She was well proportioned, and her body grew so rapidly, that when she was seven years old, she was three (French) feet nine inches in height, and weighed fifty-four (Vienna) pounds. Her muscular power was in proportion to her size; but her mental faculties corresponded with her age.

We recollect many well attested cases of this kind, in the *Dictionnaire des Merveilles de la Nature*, to which we refer the curious.

ART. X. *Gemeinsame deutsche Zeitschrift fur Geburtskunde.* Vol. i. No. 2. 1826. Weimar, Prussia.

1. NERVOUS INFLUENCE IN GENERATION.—This article consists in a theoretical speculation by Dr. Ritgen. It is one of the finest spun theories that has lately come under our notice, though not in every respect original. He presumes conception to be produced by nervous influence, and that the elementary principle of the fœtus consists in a nervous pulp, out of which the various parts that constitute the living animal, are gradually formed.

—

2. PREMATURE LABOUR, from artificial rupture of the membranes. Dr. Ritgen relates twenty cases in which he brought on premature parturition, by making a small puncture into the membranes, and letting off the liquor amnii. The liquor amnii escaped gradually, and was generally followed in forty-eight hours by regular pains and delivery. All the women recovered soon after delivery; but four out of the twenty children deceased soon after they were born. Labour was brought on in the cases alluded to, from six to two weeks before the full period of utero gestation.

—

3. PRESENTATIONS.—A few presentations and positions of the child's head elucidated by Dr. Ritgen, and accompanied with a plate, in addition to those published in the former number.

—

4. UTERINE HEMORRHAGE AFTER DELIVERY.—In Dr. Mende's pathological views respecting the cause of uterine hemorrhage after delivery, we find nothing new. His general remedies for checking it are the mineral acids, phosphoric acid, tincture of cinnamon, tincture of opium, alum, and sulphate of iron. Locally cold and warm applications, injections, and filling the cavity of the uterus with lint, sponge, or a towel twisted into a conical figure, and gradually introduced.

In cases of a partial detachment of the placenta, from which hemorrhage ensues, he recommends the immediate introduction of the hand into the cavity of the uterus, and the extraction of the placenta; he also recommends, in all cases unconnected with hemorrhage, the immediate extraction of the placenta, when it is detached from the uterus, and lodged either in the os uteri or vagina. His proceeding with regard to the placenta, we so far approve of. It is a practice which has been taught for many years in the University of Pennsylvania; but we next view his practice with more circumspection, as it is, according to our opinion, attended with great danger, and connected with many unpleasant circumstances. He recommends, in all cases where the placenta adheres to the uterus throughout its whole circumference, and where there is no hemorrhage nor contraction of the uterus, to leave it undisturbed. No effort shall be made to excite pain or contraction of the uterus, and consequent expulsion of the placenta. He acknowledges that the placenta did frequently not come away before the expiration of several days, and, in some cases, not until the menses appeared. He gives no reason why we should not interfere under such circumstances.

—

5. RETROVERSION OF THE UTERUS.—Professor d'Outrepont gives a case in detail of a woman who conceived three times, notwithstanding she had been afflicted with retroversion of the uterus. In consequence of the retroversion and impregnation, such a degree of pressure was produced on the neck of the bladder and rectum, that a complete obstruction of urine and fæces ensued. The introduction of the catheter was impossible before the dislocation of the uterus was, in some measure, reduced by manual assistance. This is the only one, out of many cases, which has come under the professor's observation, that the woman conceived whilst afflicted with retroversion of the uterus.

6. Puerperal Fever.—There are eighty-two pages of Dr. Busch's treatise on puerperal fever before us; but as his conclusion is yet to follow, we omit its analysis here.

—

7. Report of the lying-in department, at Dresden, 1825.—Professor Carus's report occupies sixteen pages, from which we extract the following: A lesser number of fatal cases occurred during this than in a few preceding years. He ascribes the reason to a better knowledge of the nature, and a more prompt and judicious treatment of the puerperal epidemic fever. Two hundred and twenty females entered the department, fourteen remained in the house from the preceding year. Two menstruated regularly two months after impregnation. Two during the three first months, one during the five first months, and one in five instances during the six first months of utero gestation. The shortest period of labour which occurred, in this year, was two hours and forty minutes. The longest continued four days, sixteen hours and fifteen minutes. In six cases, not the least quantity of liquor amnii existed, and in six, a redundancy of from five to six quarts was observed. In six cases, the liquor amnii was in a putrefactive state, which had no influence on either the mother or child; but in three other cases, the putrid state of the liquor amnii indicated disease and death of the fœtus. Whole number of births from two hundred and twenty-four females confined, two hundred and twenty-nine, including five twins. Out of this number two hundred and seventeen children presented the posterior fontanel, one the anterior fontanel, three the face, four the breech, and four the feet. Four cases occurred of prolapsus of the funis umbilicalis. The proportion of males born, one hundred and nine to one hundred and twenty females. Still born, eight males and five females. Died within a month, six males and five females. Four women died, generally with mortification of the uterus, and affection of the lungs. Out of the two hundred and twenty-nine children born, thirty-five had the umbilical cord twisted once round the neck, in five cases twice, and in one three times. In one only one foot, in another the body, in a third the foot and arm, in a fourth one shoulder and both feet, in a fifth the neck and abdomen, in a sixth the body twice, in a seventh the neck once and arm twice, and in an eighth the breech and foot once surrounded with the umbilical cord. Eight were born with congenital Goitre and one with club feet. Heaviest child born, weighed 11 pounds, lightest 2¾ pounds.

—

8 Report of the lying-in hospital, at Landshut.—Two hundred and eighty-five females were delivered from May 1, 1824, to April 30, 1826, inclusive. Natural births two hundred and sixty-nine; twenty required the assistance of art. Males born one hundred and forty-four, females one hundred and forty-five; twins four. The posterior fontanel presented in two hundred and seventy, the anterior in four, the face in two, the breech in six, knees in one, the feet in four, the transverse position in two cases. Children surrounded with the umbilical cord forty-eight. Apparently still born thirteen, still born eleven males and eight females. Died within the month, nine males, and eight females. The whole number of females delivered recovered.

9. Description of the lying-in hospital, at Landshut.—We pass over this paper as not admitting of analysis.

—

10. The Fœtus's eye compared with the fully developed eye and that of old age.—Dr. Carus's treatise on this subject is interesting; but we are obliged to pass over the greatest portion of his preliminary remarks, and the comparative proportion of the human eye with the eyes of the inferior animals, and only confine us to the eye of the human fœtus. The dimensions of the parts in the eyes of the fœtus were taken whilst they were lying in water, and entirely free from pressure. A very delicate compass was employed, and the dimensions marked on a Paris inch gauge, on which the inch

had been divided, with the greatest accuracy, into one hundred parts. The annexed figures denote so many *hundred parts of a Paris inch.* By his measurement he found them as follows.

In an embryo of eight weeks: eleven months.

Diameter of the eye-ball	6
Axis of the eye-ball	4
Breadth of the lens and the dark open circle, out of which the iris and ciliary processes are formed.	3

Embryo of eleven weeks: three months.

Diameter of the eye-ball	17
Axis of the eye-ball	15
Breadth of the lens	8
do. of the cornea and iris	9

Embryo of fifteen weeks: four months.

Diameter of the eye-ball	22
Axis of the eye-ball	16
Breadth of the lens	9
do. of the cornea and iris	12

Embryo of nineteen weeks: five months.

Diameter of the eye-ball	38
Axis of the eye-ball	33
Breadth of the lens	16
do. of the cornea and iris	23
do. of the pupil	15

Fœtus of twenty-three weeks: six months.

Diameter of the eye-ball	45
Axis of the eye-ball	43
Breadth of the lens	18
Axis of the lens	13*
Breadth of the cornea and iris	26
do. of the pupil	17

Fœtus of twenty-seven weeks: seven months.

Diameter of the eye-ball	58
Axis of the eye-ball	55
Breadth of the lens	22
Axis of the lens	16
Breadth of the cornea and iris	30

Fœtus of twenty-nine weeks: eight months.

Diameter of the eye-ball	65
Axis of the eye-ball	62
Breadth of the lens	25
Axis of the lens	17
Breadth of the cornea and iris	33
do of the pupil	18

* The lens is here yet very spherical.

Fœtus of thirty-five weeks: nine months.

Diameter of the eye-ball	73
Axis of the eye-ball	70
Breadth of the lens	27
Axis of the lens	20
Breadth of the cornea and iris	37

Fœtus of forty weeks: ten months.

Diameter of the eye-ball	85
Axis of the eye-ball	77
Breadth of the lens	29
do. of the cornea and iris	45
do. of the pupil	23

Eye of a woman sixty years of age.*

Diameter of the eye-ball	110
Axis of the eye-ball	112
Breadth of the lens	42
Axis of the lens	15*
Breadth of the cornea and iris	50
do. of the pupil	5

* What a different proportion from that in the fœtus.

ART. XI. *Gemeinsame deutsche Zeitschrift fur Geburtskunde.*—Vol. 1. No. 3. Wiemar, Prussia, 1826.

1. Busch's treatise on puerperal fever continued.

2 USE OF OBSTETRICAL INSTRUMENTS.—The following extracts are from Professor Osiander's letter in reply to several interrogations by Dr. Davis, of London. It is with us, in Germany, frequently the case, that professors of the obstetrical art boast of the very few cases in which they use the forceps. Only a few years ago, professor Boer used neither the forceps nor lever, once in one hundred cases. The seldom use of these instruments may be ascribed to prejudice, and a want of confidence and skill in their application. The forceps are now used in at least ten out of one hundred cases, in one or two cases, out of this number, they are indispensable. On account of the safety of the child, the forceps should be taken off after the crown of the child's head is even with the os externum. Before the head of the child has entered the cavity of the pelvis, the forceps ought only to be resorted to in cases of the locked head, convulsions, or hæmorrhage. In these cases, he recommends the use of an instrument invented by his father, called Dilatatorium orificii uteri. It is seldom necessary to continue the extractive force with the forceps, longer than fifteen minutes; but, in rare cases, from half to three quarters of an hour. Laceration of the soft parts occurs occasionally; but much more seldom since the forceps are taken off before the head of the child is brought entirely into the world. Laceration of the uterus is followed by a peculiar discharge; two of his cases proved fatal. Injuries to the neck of the bladder and urethra occur very seldom from the use of the forceps. If these parts sustain any injury, it is more to be ascribed to the long delay of the use of the instrument, and the great and long continued pressure of the child's head upon those parts, than to the use of the instrument. In the lying-in hos-

pital at Göttingen, out of two hundred females delivered with the forceps, not one died. In the hospital Maternité, in Paris, the number of deaths were as one to thirty-two, and one to twenty-three. The proportion of deaths is less in those hospitals where the forceps are freely used, than in those where they are seldom resorted to. Females generally recover soon after being delivered with the forceps; they become, however, occasionally afflicted with peritonitis and other inflammatory affections; but these occur more from the long labour and unavailing efforts, than the use of the forceps. In O.'s practice, hardly one child, out of twenty, sustained any injury from the forceps.

Lever. Professor O. uses this instrument but very seldom. He considers it incomplete. In some of the German hospitals it is not used at all.

Cutting instruments. Professor O.'s father never perforated a child's head in an extensive practice of thirty years. He performed the Cæsarian operation twice, and gastrotomy once in a case of extra uterine conception. All proved fatal. The professor prefers perforation of the child's head, to the Cæsarian section; the latter he considers to prove fatal in two out of three cases. The death of the child occurs, most generally, from the early discharge of the liquor amnii, and the severe labour that precedes the Cæsarian operation. The most favourable time for this operation is before the membranes have ruptured, or immediately after, and when the os tinuæ is about half dilated. The incision made in the parietes of the abdomen and uterus must be six inches long; parallel with, but an inch from the linea alba. The incision should begin two or three inches above the umbilicus, and extended downwards. After the operation, the sides of the wound in the abdomen are brought together, and supported by three or four interrupted sutures and adhesive straps. The uterus requires no suture. A case is related by F. B. Osiander of a woman, on whom the Cæsarian operation was performed three times. The last proved fatal. The professor was present when Dubois divided the symphysis pubis of a rickety woman, whom Baudelocque had pointed out, at an early period of utero gestation, as a case that required the Cæsarian section. The woman was happily delivered and recovered. The only case that proved fatal from the division of the symphysis pubis is the one related by Mursinna.

—

3. Cæsarian Operation.—Dr. Lanz relates a case of the Cæsarian section performed by himself, with complete success, to both mother and child.

—

4. Lusus Naturæ.—An extraordinary case of a lusus naturæ is related by Dr. Swartz, and accompanied with a plate. A double female, with two faces, each of three quarters size, three eyes, one neck and thorax, two arms, abdomen divided into two below the umbilicus, and four legs. Not the slightest cause could be ascertained, on the part of the parents, why nature had deviated from her usual course to such a degree.

—

5. Danger resulting from early respiration of the fœtus.—The opinion advanced by Dr. Ritgen, and the case on which he has founded his doctrine, occupy better than thirteen pages. He considers it a dangerous circumstance if the child respires, whilst all but the head is yet unborn. In this situation a child may suffocate, in a few seconds, in the evacuated blood or liquor amnii; or from pressure on the head or face, produced by the adduction of the mother's thighs. His opinion rests on a single case, that resulted in the death of the child; but the umbilical cord was twisted twice round the child's neck, and, as labour progressed, the cord was drawn so tight, that marks of violence were detected, by dissection after death, from its effects. The cause from which death resulted, in this case, is obvious. We have met with a number of cases, in our practice, where children respired and uttered imperfect screams, immediately after the head was brought into the world, and remained in this situation for several minutes; and, as yet, we have not met with a single instance of the kind that terminated in the death of the child.

We have always believed the early respiration to be a mark of a strong healthy child.

—

6. Presentations.—Dr. Mende's second treatise on presentations contains nothing new, except that he is able to predict, soon after conception, from the figure of the female, and state of the lumbar vertebræ, what kind of presentation the woman will have, when she arrives at the full period of utero gestation. As it is not likely that American accoucheurs *can learn* this art, we will pass it over, rather than perplex their comprehension.

—

7. Report of the lying-in hospital, at Göttingen.—This report is drawn up by Dr. Mende. He relates a case of a woman whose legs, thighs, and genital organs were so much distended with anasarca, that he could not bring his finger in contact with the os tincæ, and consequently, was unable to ascertain the state of the uterus, and presentation of the child. He consequently made incisions into the labia pudendi, to let out the serous humour, and enable him to make examination per vaginam. The woman brought forth a healthy child. She became perfectly blind during parturition, and her sight did not return till after the lapse of several days.

—

8. Report of the lying-in department, at Cöln, 1825.—Dr. Merrem reports one hundred and forty-two children born in this department. One hundred and thirty-seven were born by the efforts of nature only, and five with the assistance of the forceps. The umbilical cord presented in two cases.

—

9. Bony Concretions in the placenta.—According to Dr. Carus, out of one hundred placentæ, from five to eight contain granular indurations, and two or three evidently layers of calcareous earth. He discovered them most frequently in scrofulous and other unhealthy constitutions. The concretions were always found on the maternal surface of the placenta. The largest pieces which have come to his notice, were from 1-4 to 1-3 of an inch in diameter. By professor Ficinus's chemical analysis, they were found to consist of albumen, animal fibrin, phosphate of lime, phosphate of magnesia, carbonate of lime, and sulphuric acid.

—

10. Mojon's new method of *separating the placenta from the uterus.*—An extract on this interesting subject is made from the Giornale critico di Medicina analitica, and communicated by Dr. Nägell. "I undertake to publish a new method of removing the placenta from the uterus, by bleeding after parturition. It consists in allowing the blood to pass off from the placenta, and then injecting cold water, acidulated with vinegar, through the umbilical vein into the placenta. Should our object not be accomplished by the first injection, the injected fluid must be pressed out, and a fresh portion thrown in. This can be repeated as often as necessary for the separation of the placenta. The sudden impression and dilatation of the placenta, which the injected fluid produces; the coldness immediately communicated to the tomemtum, which connects the placenta with the uterus, and excites these visceræ to contract, and the increase of the weight of the placenta, produced by the injected fluid, are supposed to be so many causes that combine in accomplishing the separation"

—

11. Literary Intelligence.—This concludes the present number. We find nothing of sufficient import in this chapter for our analysis.

ART. XII. *Bibliothek der practischen Heilkunde*, Berlin, 1827.

(*Continued from page* 183.)

1. HYDROPHOBIA.—Dr. Urban's Method of treating Hydrophobia, continued. On the 12th September, 1811, M. of Creutzburg had his hand bitten, by a strange dog, and having no confidence in Dr. Urban's simple treatment, desired the application of spanish flies to the part, which became very red and painful, and subsequently was covered with a considerable number of vesicles. The patient informed Dr. U. that he had lost an uncle, who died of Hydrophobia. He had been bitten by a mad dog, and was cured as it was supposed; but some years afterwards, a bluish-red spot appeared in the situation of the bite, and was soon followed by Hydrophobia and death. This case satisfied Dr. U. upon two points, 1st. the long time that the poison may remain inactive in the wounded part, and 2dly, that local symptoms always precede the general infection of the system.

2. The same dog that bit the above individual, two hours after, bit a lad, fifteen years of age, on the right hand; he applied for assistance about eighty-nine hours after the reception of the injury, and at this time, the part was much inflamed and painful. A dry cupping glass extracted from the wound a small quantity of yellowish serum, and the whole of the inflamed part was freely scarified, and well washed with luke-warm salt and water. The saline solution was kept constantly applied for fourteen days, and the patient was dismissed as cured, and has remained perfectly well ever since.

3. On the 18th July, 1818, a little girl, nine years of age, and her brother, a boy of eight years of age, were both bitten on their right hands by a small dog. Both these children were attended by Dr. U. who permitted the wounds to heal seven weeks after they were received. Four years and thirty-six days from this time, the girl discovered a redness about half an inch from the cicatrix, and having been particularly charged to make known without delay any such appearances, Dr. U. was called in, and being doubtful about the true character of the inflammation, declined all interference till the next day. The redness had now increased, there was much pain, and a distinct vesicle was formed upon the inflamed part: this was immediately scarified and immersed into a warm solution of salt, and compresses saturated with the same, were constantly applied to it. On the 26th August, the inflammation had extended above the wrist, and the scarifications and solution were repeated as before. The process of the disease was now arrested, and after the expiration of fourteen days, the solution was discontinued, and the wounds were allowed to heal. The patient is now living, and in the enjoyment of good health.

4. On the 9th of October, 1820, a dog bit a man on both legs, a pregnant woman on one leg, and a servant girl on the thumb; and soon afterwards he also bit a sow, a cat, five dogs, three fowls and a duck, without any suspicion of his madness being excited; but afterwards, in another part of the country, he wounded five more dogs, and on the subsequent day (10th,) he bit three additional dogs, and then ran through the fields in chase of the rabbits. The fowls were eaten without causing any injury to those who partook of them: the three persons who had been bitten by the dog, having heard on the 16th, that he had been shot as a mad dog, took the alarm, and sent for Dr. U. who was unable to attend until mid-night. The wounds of all these were cupped, washed and treated with the saline solution. This treatment quieted the fears of the man and the servant maid, but the pregnant woman imagining that the ninth day after the bite, was a most critical period, became much alarmed, and was instantly attacked with an ague, great anxiety, dimness of vision, tinnitus aurium, and violent vomiting. These symptoms continued for many hours, but were finally, by kind persuasion, and rest, dissipated without the use of internal remedies, and she, as well as the other two,

were perfectly cured. All the animals that had been injured, with the exception of the hog, were, by order of the police, shot. On the 22d of the month, the hog became very uneasy, but still continuing to take its food with an appetite, no apprehensions were excited; however, merely as a precautionary measure, it was confined by itself, and in a short time the symptoms increased greatly; the animal breaking out of its pen, and chasing furiously all the hogs it met with, till it was with much difficulty secured. It bit fiercely at every thing that was thrust in to it, foamed at the mouth, had watery eyes, and finally appeared so much distressed, that it was, from mere motives of humanity, killed.

5. On the 18th December, 1811, about 10 o'clock A. M. a strange dog came into the village, and bit a girl on the calf of the leg, and a woman in many places on both legs and the right wrist. Her tendon of Achilles was pierced by a tooth, and the outer ancle bone presented three distinct impressions of the animal's teeth. On the sixth day, five distinct spots, similar to flea-bites, were discovered on the left calf, and on the seventh day, a like spot was found on the right: all these were treated according the plan as laid down. On the 13th January, and the 27th day after the injury, the woman felt on the right wrist, the epidermis of which had been scarcely scratched, an itching which soon was changed to a severe burning pain, and prevented her from sleeping. Upon examination, the next day, the part was considerably inflamed, and covered with several bluish vesicles, which Dr. U. opened, and unfortunately forgetful of two slight scratches on his fingers, inoculated himself with the poison. On the 9th day after this operation, Dr. U.'s finger began to itch considerably, without however causing him to feel any apprehension until the 11th day, when the pain became very severe, and was shooting towards the axilla, accompanied with pain of head, depression of spirits, great thirst, and vomiting. Blue vesicles formed on the fingers, and were treated in every respect according to Dr. U.'s method, which succeeded in curing him and his patient, from whom he had received the disease.

The following two cases are intended to illustrate the unfortunate consequences of neglecting the active state of the poison at the wounded part.

6. On the 19th and 20th February, 1822, a man and his four children of the age of three months, five, eight, and nine years, were bitten by a dog, who was himself, twenty one days before bitten by a strange dog. Dr. U. attended the whole of these persons, from six to eighteen hours after their misfortune, and when he had urged his treatment as far as he had deemed necessary, he impressed upon their minds the necessity of paying the strictest attention to any local itching or inflammation that might appear. The father, who was at first so much alarmed, permitted himself to be persuaded that the dog was not mad, and on the 11th of April, he paid no attention to two vesicles on his hand until the 12th or 13th, when he was suffering fully from the effects of Hydrophobia, and when Dr. U.'s mode of treatment could afford him no relief. The widow, taught by the melancholy fate of her husband, sent on the 17th April for Dr. U. to visit the child of nine years of age, who had on the hand, that had been injured, some redness, and a vesicle with much pain; this vesicle was opened, scarified, and properly dressed. The child recovered perfectly, without experiencing any further accidents, and the three other children never had any return of their attacks, although they were bitten at the same time, by the same dog, and were all treated alike in the first instance.

7. On the 24th August, 1823, a woman at Salmanhausen, was so severely bitten by a mad dog, in the fields, that she was unable to walk home. Dr. U. could not visit her until about eighteen and a half hours after the injury had been received, and then found her in the hands of a physician and surgeon, of Gerstungen. There were twenty three distinct wounds, some penetrating partially the tibia and the tendon of Achilles; all these wounds were cupped, cleansed, and well washed with milk and salt, and dressed with compresses moistened in the solution, with directions to keep the wounds con-

stantly wet. Seven days after this, there was an evident generation of the morbid poison, as was distinctly evinced, by a considerable inflammation, and many vesicles on the affected part. The matter of the sores was black and offensive, and symptoms indicating a nervous fever were present, and for which internal remedies were required. The inflamed parts were for several successive days, cupped, and well washed with salt, in an infusion of bark; at this time, indisposition compelled Dr U. to remain at home, and he was obliged to direct the woman herself to proceed with the treatment. On the 27th of October he visited her again, and found all the sores healed, but strongly advised her to pay the strictest attention to any new symptoms that might occur, for he thought there might still exist some latent germs of the disease in the part. On the 21st March, 1824, Dr. U. was again called to the patient, who, it appeared, eight days before at a feast, had been very intemperate, and the next day complained of pain in the injured limb, but notwithstanding the advice of her friends, would not consent to apply for relief. The pain continued to increase, but she was still under no very serious apprehension, particularly as she had been told that the dog had never been mad, and that as seven months had expired, since she had received the injury, there was no danger of hydrophobia. On the 17th of the month the pain had extended to the abdomen, the inguinal glands were enlarged, and she could not sleep. On the 18th, early, she could not drink, and there was not only a dread of water, but likewise of air and light, so that it was necessary to darken the room, and to stop every crevice in it with tow. Upon Dr. U.'s arrival, he found the patient lying across the bed, and asked her why she had not complied with her promise to inform him immediately upon the appearance of any new local symptoms. She pressed his hand, embraced him, begged pardon for her neglect, and earnestly desired him to bleed her. The injured leg was already insensible, the pulse was irregular and extremely weak, but still bleeding was attempted, and without success, for neither the veins of the arm, nor the jugular, would yield a drop of blood, and whilst Dr. U. was endeavouring to press the blood from the vein, the patient expired. Dr. Urban has observed, in all the cases of Hydrophobia, which he has seen, that the sexual appetite is considerably increased in both sexes, and in all animals, just before the general symptoms of the disease disclose themselves, and further, that the blood of individuals afflicted with this dreadful malady, is much thicker and darker, and less coagulable than in healthy persons.

2. Spontaneous Hydrophobia, caused by fear, by Dr. Laschke.—A servant maid, twenty two years of age, who had been remarkably melancholy for some days, but still performed all her duties, fell down suddenly, whilst she was engaged in her morning work, as was supposed by her employer, in a fit. Her limbs trembled much and were constantly and violently striking against the floor, her eyes were wild and distorted, and she appeared to be making constant efforts to bite every thing within her reach. These symptoms lasted about ten minutes, after which she recovered her consciousness, and was induced, very much against her wishes, to take to her bed, and she had scarcely gotten there before a much more severe attack came on. She tore her clothes with her teeth, sprang furiously out of the bed and attacked all the by-standers with so much impetuosity that they had great difficulty in escaping from her, and confining her in her room, when she moaned greatly, bit the latch of the door, and a great quantity of potatoes that were lying on the floor. This attack after a time passed over, and she was again persuaded to retire to her bed. Through a proper degree of precaution, the room was kept constantly shut and the windows boarded up, on the outside of the house. The paroxysms continued to return frequently, and always attended with the same symptoms. The district surgeon, with several persons, called to see the patient, and found her lying in bed with her arms considerably lacerated and covered with blood. The pulse was small, contracted, but not quick; the skin was dry, the eyes dull and shy, and the

face red. To usual questions she could not reply, but at last with great difficulty, she declared that she was well and nothing was the matter with her. The surgeon handed her a glass of water, this caused great trembling, but still she succeeded in swallowing a few mouthfuls. The water had barely reached the stomach, when a new paroxysm attended with the severest symptoms came on; she sprang out of the bed, with a ferocious look, and pursuing all the by standers together with the surgeon, compelled them to fly from the room, and confine her in it, by closing the door upon her. This attack continued about ten minutes, and then she returned to her bed. Although it could not be ascertained, that this unfortunate woman had been bitten by a rabid animal, still it was perfectly evident that she was really afflicted with Hydrophobia, and accordingly the surgeon adopted the subjoined treatment: The vein of the right arm was opened by a large incision, from which the blood flowed in a large stream, and with great rapidity, and immediately the most violent convulsions appeared. The whole body trembled, the eyes were wild, the teeth gnashed, and there was great desire to bite, loud screaming, and so strong a motion of the body that it required four strong men to hold her. When this attack subsided, the patient remained sitting with her eyes fixed on the ground, and without speaking a word. Sixteen ounces of blood had already been lost, and there was no perceptible change of the pulse. The vein of the left arm was now opened by a large incision, and when thirty six ounces of blood from both arms had been drawn, a complete syncope took place, when the arms were bound up and the patient put to bed. Four grains of calomel and one of opium were administered every four hours; the powders being put upon the tongue in a dry state, and a little water directed after each to wash it down. The convulsions returned immediately after swallowing the water, but were much less severe than before, and of much shorter duration. Besides the calomel, a drachm and a half of mercurial were prescribed, to be rubbed on the neck and throat every two hours. During the use of those means, the attack became less violent, and after four o'clock of the same day there was was no return of them. It should be remarked that after the third powder was taken, the patient had great nausea and very severe vomiting, which brought up a large quantity of bile and mucus, after which she felt much relief, and had a good sleep. During the night there was no return of the symptoms, but on the contrary, the patient slept well and got up the next day and changed her torn linen. She had no recollection of the occurrences of the preceding day, and no more attacks, but was troubled with a constant vomiting: on the next day, the surgeon found the patient's pulse somewhat stronger, the eyes were still dull but without any appearance of wildness; seven of the powders had been taken. The patient spoke but little, complained of pain of head and chest, and of excessive debility. The powders and the ointment were continued, and mucilaginous drink were ordered in considerable quantities, which the patient not only could now swallow with ease, but even desired, as she had great thirst. On the following day, she was much better, and complained of nothing but weakness and a want of appetite; she could drink water without the slightest inconvenience, and ate some pickled cabbage with pleasure. She stated that she had never been bitten by any rabid animal, but confessed, that about a fortnight before her first attack, she was greatly alarmed by a large dog, that she fancied was mad. It does not appear that the mercury used in this case acted at all as a salivant.

ART. XIII. *The London Medical Repository and Review, for September, October, November and December*, 1827.

We pass over the paper headed "State of the Question, as to Physicians practising in London, without License from the College." It being a continuation of the same subject inserted in a previous number, our remarks then made in reviewing it will be equally applicable in the present instance. As we are unprepared to arrive at a just decision, we decline taking any part in the contest.

—

1. MORTIFICATION.—B. J. Nind, Surgeon, is the author of "Pathological Facts and Observations" tending to prove that mortification uniformly arises from *increased action*, in opposition to the generally received opinion that it may arise either from increased or diminished action. On consideration of the subject Mr. N. is induced to view diminished action merely as the *effect* of the disease, that it is an advanced stage or a mere conversion into a chronic state.

The paper for the most part is occupied by a reply to a question made by his opponents, in which it is asked how increased action can cause a mortification of the toe, when the arteries of the limb are ossified. Chief of the facts and arguments here adduced are derived from post mortem examinations.

We are rather disposed to doubt the truth of Mr N.'s theory, and before we take leave of this paper, would beg to submit for consideration the following, viz. What has increased action to do with the mortification of a part which is cut off from the general circulation?

—

2. FINE ARTS.—J. R. Alcock, Esq. gives a very interesting paper "On the Uses of the Fine Arts, as subservient to the Medical Sciences."

Mr. A. in treating of this subject, does not omit to notice the immense advantages derived from the art of printing and engraving. He thus observes, "by facilitating the means of communication, many important discoveries and improvements have been handed down to us that would either have been entirely lost, or but very imperfectly understood."

Bichat was disposed to consider *drawings, engravings and models* as useless, or even worse. Which opinion is true when they are resorted to as *substitutes* for actual dissection, but when viewed as auxiliaries to the study of anatomy and surgery their utility is obvious.

Models in wood or wax have also been resorted to with a view of preserving specimens of morbid anatomy as regards form and structure. Indeed no one at this enlightened period would deny their immense utility in promoting the study of *surgical* anatomy and *pathology*.

FONTANA, an Italian artist, attempted to imitate nature, by carving the muscles in light wood so as to take off and be replaced, in which scheme M M. *Ameline* and *Auzoux* afterwards engaged. Models in *papier maché* were also designed, but these plans were all found so defective in accuracy of form, colouring and texture that they are now abandoned.

In relation to WAX MODELLING, our author's opinion may be better given in the words of the text, "We are very sure that we have seen specimens so perfectly imitating parts of the human body, that, had we not been previously informed, we should have found it impossible to decide whether they were natural or artificial."

State of the Question among London Physicians is continued, which we pass over without further notice for reasons previously assigned.

—

3. PHYSIOLOGY.—John Davies, Esq. gives a very erudite paper on the "General Principles of Physiology," which subject is continued in the successive numbers of the Repository. We have with pleasure travelled over,

and attentively considered the principles laid down by Mr. D., and can truly say, we have been instructed in some parts and bewildered in others. These essays are truly philosophical, and do credit to the talents of their author. We could not avoid saying thus much, since we are constrained for want of room from entering into an analytical review of their merits.

---

4. Mortification.—In the continuation of Mr. Nind's paper on mortification, arising in every instance from increased action, we discover much valuable matter. By way of argument, Mr. N. introduces angina pectoris as being usually associated with ossification of the coronary arteries of the heart, in which there is increased action he infers from the nature of the remedies employed in its treatment.

"The treatment that will best agree with this theory of mortification will, I am convinced, be found the most efficacious in practice. That bleeding is always indicated, or even admissible, I will not take upon myself to assert; for in those instances where persons are deficient of blood generally, venesection does not merely fail to give relief, but absolutely increases local determinations, as we have opportunities of witnessing in long-continued inflammations of the principal viscera: but my only object *now* is to establish the *cause* of mortification, which must lead to an improved treatment of this disease."

—

5 Circulation.—F. Bailey in a very judicious though brief essay replies to certain arguments advanced against the Harveian doctrine of the circulation. This theory attributes to the capillaries a muscular power whose existence has never been demonstrated. An argument in favour of this hypothesis is derived from the emptiness of the arteries and engorgement of the veins found after death. But this phenomenon may be explained on the doctrine which supposes the heart to be the sole agent in the circulation. Prior to dissolution, it is evident, the power and action of the heart is impaired, and consequently a smaller quantity of blood is sent into the aorta. The quantity of blood, therefore, in the arterial system, will correspond with the action of the heart. An engorgement in the veins necessarily follows. Another argument alleged in favour of the muscular structure of the capillaries is that by an alternate contraction and dilatation, a vacuum is produced, which empties the arteries on the principle of exhaustion. But admitting the existence of a condition which, according to nature's laws, can have no existence, how, says Mr. B. can it promote the capillary circulation? In this state of things, the blood beyond the vacuum would be as much retarded in its movement as that coming from the heart would be accelerated, and a state of perfect quiescence ensue.

A *third argument* in favour of this theory has been deduced from cases of death by lightning, in which the arteries and veins are found loaded with blood. This phenomenon, accordingly, has been imputed to a *sudden loss* of muscular power in the capillaries, which may be better explained, we think, by attributing it to a *sudden loss* of *vital power*.

By a reference to the experiments of Dr. Hales, in which it was proved that by the time the blood arrived at the veins, it lost 11-12ths of its original momentum; also, Magendie's experiment, proving that pressure on the crural artery of a dog *instantly* affected the flow of blood in the corresponding vein, Mr. B. concludes his paper, satisfied with having advanced ample evidence in refutation.

6. Nasal Duct.—John Reeve, M. R. C. S. furnishes some ingenious and novel views of the anatomy of the apparatus concerned in the conveyance of the tears into the nasal cavities. This process has been ascribed by Richerand and other physiologists to an inherent power of absorption in the lachrymal ducts, or to a power termed capillary attraction. Mr. R. attempts to explain it on a principle in hydraulics by which fluids rush to fill a vacuum.

We transcribe the words of the text:

"*The Nasal Duct will be found to terminate beneath the inferior spongy bone, in the following manner:*—A web of dense membrane extends from the inferior spongy bone to the superior maxillary bone, immediately below the nasal duct, and forms the roof of the inferior nasal fossa: in the middle of this membrane there is a circular aperture, by means of which the duct communicates with the nostril, its diameter being considerably smaller than that of the canal immediately above it. The membrane in which this orifice is situated will be observed to be in a somewhat oblique position, its anterior being rather lower than its posterior part; so that if pressure were applied from behind, it would force that part of the membrane in which the orifice is situated against the superior maxillary bone. At about a line and a quarter, or the tenth part of an inch, above this external opening, there is attached to the outer part of the nasal canal a delicate valve, which appears to be formed of a fold of mucous membrane; and directly beneath it, a small sacculus or enlargement of the canal, such as we find *above* the valves in veins: by holding the opening of the nasal duct in a strong light, and searching carefully with the pointed extremity of a probe, this valve or fold of membrane, of which I have spoken, may be raised from the anterior and outer side of the canal; and it will be the more readily seen if the external opening be previously a little enlarged. This valve, although so thin, is yet of considerable density; and if a blunt-pointed probe be passed in a direction upwards and forwards, it will be found firmly to resist its further progress.

"We come now to consider the functions of this structure; and it must be particularly remarked, that the direction of the current of air, both in inspiration and expiration, but more especially in the latter, will be considerably altered by the shape of the inferior meatus.

"We shall now suppose the act of inspiration to take place, during which process air will be drawn from all points towards the rima glottidis, principally from the external air, from all the meati of the nose, from the antrum, from the cavity of the tympanum, and *from the lachrymal sac;* thus will the lachrymal sac be emptied of its contents, or at least partially so, be they air, mucous secretion, tears, or the whole combined. On the contrary, during expiration, the air, rushing from the lungs through the passages of the nose, strikes against the membrane forming the upper boundary of the inferior meatus,—and which, I have before said, was placed somewhat obliquely,—presses it against the anterior and outer part of the superior maxillary bone, and thus closes the aperture of communication, the valve being, I believe, also raised by the small quantity of air which may have passed the external opening. By these means the sac is uniformly kept in a state approaching to vacuum, it being emptied by the act of inspiration; whilst, during expiration, it is prevented from again filling, by the closure of its orifice."

—

7. Case of Abscess *supervening Nephritis*, is related by John Phythian, Esq. It is stated that after every effort at resolution had failed, an eschar was made in the tumour occupying the region of the kidney, and after a profuse discharge of matter, which continued for some days, he completely recovered.

—

8. Monstrosity.—John Tucker, Esq. gives some account of a Fœtal Monster, which, during accouchement, presented the heart. The child "cried lustily," and lived two hours. We give the following abstract:

"The fœtus appeared to be full grown; and there being a division throughout the chest and abdomen, the whole contents of both cavities were exposed to view. The display of the thoracic viscera arose from a separation through the median line of the sternum, which extended to the pubes; the edges of the recti muscles were reverted, as it were, and faced with a white, tendinous border. But the deviations did not end here. The right hand exhibited but one finger, and the left foot but one toe. The umbilical chord made its exit on the back, between the scapulæ."

9. Hydatids.—W. Anderson, M. R. C. S. describes a case of hydatids, which were expelled at the 9th month of utero-gestation. There was no hæmorrhage after delivery, and the patient did well. A solid substance, resembling the placenta, was found on examining the mass, which was clustered in the form of grapes, and weighed upwards of five pounds.

10. Ossification of Mitral Valves.—F. Bailey relates a case of ossification of the mitral valve of the heart. The symptoms developed, during the patient's life, were so well marked, that the medical attendant could not err much in forming a correct diagnosis. The heart was found much larger than natural, its substance of a darker colour, soft and friable in texture, which we have found to be a frequent attendant on ossifications of this organ, probably as suggested by Mr. B., caused by the long continued and violent action to which the heart was subjected. External surface of the pericardium highly vascular, and adhering, in most parts, firmly to the surface of the heart.

"Opposite to the auriculo-ventricular opening of the left side, there was a bony deposit, about the bigness of a shilling. The auricles, instead of being loose and pendulous, were agglutinated to the substance of the heart by lymphatic exudations. The right auricle and ventricle, but particularly the former, appeared greatly enlarged and gorged with blood; but the tricuspid valve, and the pulmonary artery with its semilunar valve, exhibited nothing deserving mention. On laying open the left auricle, a bony mass was discovered at the origin of the mitral valve; and it was ascertained, on further inquiry, that the *one-half of that valve had degenerated into a thick osseous substance.* The other portion of the valve was much thicker than usual, and approached to the nature of cartilage. The aorta and coronary vessels were in a sound state."

11. Materia Medica.—John Epps, M. D., in an Essay on the Study of Materia Medica, after taking a cursory view of natural objects, and some of the laws that govern their motions, alludes to some of the modes mankind had recourse to, in order to acquire a knowledge of the virtues of medicinal substances.

The paper concludes with judicious directions on the proper mode of making experiments and observations.

Art. XIV.—*The London Medical and Physical Journal for May*, 1827.

1. Paraplegia.—Dr. T. H. Burder has written an excellent paper on this subject. His principal design being to show that the spinal marrow and its investments have as much to do with the origin of paraplegia as the brain.

Several cases are selected from the writings of Drs. Bailie and Abercrombie, to whom the doctrine of the cerebral origin of paraplegia is mainly attributed. In these cases, the evidence furnished is very unsatisfactory and inconclusive, inasmuch as their researches were confined to the brain.

In Dr. Bailie's posthumous MS. of facts collected relative to paraplegia, we find a very frequent concurrence of head affection with the disease under consideration, and we have to regret that the examinations did not extend to the medulla spinalis and its meninges.

Dr. B. next proceeds cursorily to examine opinions of other pathologists, viz. Morgagni, Bonetus, Parry, and Bouillaud. The two last named authors mention the co-existence of spinal and cerebral disease. The conclusions to which Dr. B. has arrived from the recorded cases, are thus stated:

"1st. From the cases of paraplegia examined in this paper, as well as from every other recorded example which the writer has been able to obtain, no proof whatever can be adduced of the disease having arisen from cerebral causes alone.

"2ndly. From the history and symptoms of several of the alleged examples of paraplegia, it is more probable, in the absence of direct proof, that concomitant disease existed within the spinal column, than that the brain alone had suffered from morbid changes.

"3dly. In some other of the alleged examples, in which fluid was discharged from the vertebral theca, we have no proof but that the mere presence of the fluid within the theca, independently of the cause which produced it, may have occasioned the paraplegia."

In conclusion, however, Dr. B. is not disposed to contend against its occasional origin from cerebral causes alone. He thinks, and no doubt thinks correctly, that the state of the spinal marrow has been too much neglected in post mortem examinations. The profession, generally, are too supine, hasty, and superficial, in their pathological investigations. General inferences are too often drawn from a few isolated facts.

2. Small-Pox and Vaccination.—Dr. Gregory furnishes some valuable information on the evidence of effective vaccination. That small-pox may and does occur after vaccination, there is the amplest evidence, and it is equally well established that this obtains much oftener than small-pox after variolous inoculation. To this form of small-pox, Dr. G. applies the term varicella variolodes. Although much must be attributed, in these cases, to idiosyncracy; much more is due to imperfect vaccination. Dr. G. goes on to say,

"Perfect vaccination affords, with certain exceptions, complete and permanent security against the small-pox. Imperfect vaccination affords security more or less permanent, more or less complete, according to the degree of imperfection in the vesicle, and the consequent saturation of the system. The whole extent of my experience at the Small-Pox Hospital for the last five years, my observations on the phenomena of re-vaccination, and the results of my correspondence with practitioners in the country, bear out this principle in its fullest extent."

The evidences of perfect vaccination, are either temporary or permanent. As the former are so well described by Jenner, Willan, and others, Dr. G. confines his attention to the latter. We give his account of a perfect vaccine cicatrice in a condensed form. 1st. It should be distinctly defined in all periods of life. 2d. It should be circular, or nearly so; its diameter being of little moment, so that it does not exceed that of a sixpence or small wafer. 3d. It should be indented and radiated.

The sources of failure may be, 1st. The employment of effete virus. 2d. The pre-occupation of the system by dentition, fever, pertussis, and some cutaneous eruption. 3d. The institution of the process at an advanced period of life. Dr. G. assigns as a reason, that at an early age the system will be more completely saturated with the virus, when the mass of blood and humours is small, than when it is great. Dr. G. prefers the period between the 2d and 4th month after birth.

We beg to state our entire concurrence with Dr. G.'s opinion, that, in practice, it will be found there are various grades of imperfection in the process. That the system may be protected from attacks of small-pox for a certain period, when its influence will cease to exist, leaving the individual as much exposed to variolous poison, as if vaccination had never been practised. Indeed, a case in point has come under our personal notice. We can, therefore, amply testify to the truth of the observation. The paper concludes with observations by I. Dalton, Esq., on epidemic small-pox, as it appeared at Bury, St. Edmund's, in 1825. Out of 75 cases that were vaccinated, 10 took the small-pox; the eruptive fever was generally severe, the pustules few, excepting in one case, which dried away on the 5th day, and very much resembled varicella. There was no secondary fever.

"I will briefly add, that, where I have been induced, by the fears of my

patients, to re-vaccinate as a test of their perfect security, I have invariably found a very extensive local inflammation of a mixed character, with great soreness and enlargement of the axillary glands, high constitutional irritation, and in several instances vesications threatening sphacelus, with an irregularly formed pustule, pouring out a semi-ichorous and ill-concocted acrid discharge."

E. Morton gives the result of his experience, relative to variola supervening vaccination. Of 40 children who were vaccinated in the Royal Infirmary, 17 had small-pox afterwards; 7 only of these were seen and attended by Mr. M.

The disease was uniformly mild, and passed rapidly through its different stages. "One of the patients, six months old, had only two pocks; while her elder sister, from whom she received the infection, who had not been vaccinated, died of confluent small-pox."

Several cases are annexed, illustrative of the principle, that small-pox, after vaccination, prevails in families from peculiar idiosyncrasies.

A case of small-pox, occurring 23 years after vaccination, is communicated by Dr. Heineken. On the appearance of small-pox in any district, Dr. H. strongly advises the plan of re-vaccination to be generally adopted.

We transcribe his concluding observations on this case.

"Upon a fair and impartial review of all the circumstances, I think, therefore, I am justified in saying, that the infant had the genuine cow-pox when four or five days old; that its antivariolous power continued in force for three-and-twenty years, and then ceased: and that its character ought to be rather exalted than depressed by the fact of its having exerted its influence so long, when its introduction had taken place at a period so nearly bordering upon the incipient verge of infantile existence. The wonder is, not that it failed when it did, but that it was so long available.

"I may take this opportunity of stating, that, as far as my observations and inquiries go, no other well-authenticated instance of genuine small-pox after genuine and well-authenticated vaccination has occurred here: spurious cases of both are not wanting."

3. Functions of the Nerves.—Mr. Broughton details five cases, illustrative of the distinct and separate nervous functions subservient to volition and sensation. The treatment consisted mainly in the repeated exhibition of active purgatives. In the first case, the muscles were obedient to the will, while the entire surface of the left side of the body was totally insensible. In the second case a condition the reverse of this obtained. In the 3d, there was voluntary power over the muscles, with insensibility of the integuments of the left side. The reverse of this was observed in the 4th case. The 5th case we beg leave to transcribe in the language of the text.

"Case V.—A gentleman in the cavalry, aged twenty-four, while in the South of France, during the autumn of 1825, fell sixteen feet into the dry bed of a river, and pitched first on the right hip. He found himself perfectly sensible and collected, and free from pain, but totally incapable of moving his lower limbs, or of standing when placed upright. He was conveyed home, and remained some time confined to his bed. During this period, *the skin over the nates and part of the loins, the perineum, the penis, and the upper part of the thighs, was rendered entirely insensible to feeling, so that a pin might be inserted without the least degree of sensation;* and, while this insensibility was coming on, he regained the power of moving his lower limbs by slow degrees, the skin of these never having lost their feeling. When after some time he was able to get out of bed, the flesh of the thighs, legs, and feet had wasted, and the limbs become smaller, with very limited powers of motion, by short dragging steps, and assisted by a stick. At first there was great inflammation of the glands in the groin, and about the urethra, with much pain extending along the perineum. Subsequently, these

parts becoming insensible to feeling, he was scarcely conscious of the presence of the catheter. The urine, for some time after the accident, emitted a disagreeable odour, and was constantly thick and muddy. The feces came away unconsciously to the patient.

"In March following, he returned to England. His gait was perceptibly awkward, and impeded by short and unfirm steps. The feet, legs, and thighs were less than usual in size; the skin over them was perfectly sensible; but, from below the small of the back to the top of the thighs, the skin, including that of the penis, was quite insensible to feeling. Erections of the penis came on frequently during sleep, and often accompanied by emission without sensation. When the bladder was full, the urine overflowed on the slightest irregular movement, and run out of the penis unconsciously to the patient. The feces continued in the large intestines, unless they were liquid, and he had no voluntary power to assist their expulsion, being obliged to take medicine to promote their passage.

"In the course of last year, the limbs assumed a fuller condition, the step became bolder and more measured, and he could manage a horse. His powers of urinary retention and expulsion gradually returned, and the feces were properly passed; but the *insensibility of the integuments remains with little improvement to this day, a sense of numbness continuing in the skin of the perineum and nates;* while his locomotive powers, and development of flesh in the lower limbs, are as good as ever. The Ung. Antimon. Tart., electricity, and strong stimulating liniments, have been applied to the loins without any benefit; but his general health seems to have been improved by the shower-bath."

4. Two cases of Ruptured Bladder next follow, as treated by Mr. Bell and Mr. Shaw at the Middlesex Hospital. They were the result of violent injuries done to the parts, terminating inevitably in death, and contain nothing deserving of particular notice.

5. Diseases of the Urinary Organs.—Cases, in illustration of these diseases, as treated by Mr. Jeffreys, at St. George's Hospital, we next proceed to analyze. The first case was treated for morbid enlargement of the left testicle, and is an example of the extent to which morbid alteration of structure may sometimes proceed, without its existence being known to the patient or his medical attendant.

No doubt the disease in the kidney had been forming a number of years, and the patient did not suffer from the urinary secretion, as experience has shown that an animal may with impunity be deprived of one of these organs.

"The following curious appearances were observed in the left kidney:—It had no vestige remaining of its natural structure; the pelvis and infundibula were entirely obliterated, and had assumed the appearance of a membrane without any cavity. The ureter, for two-thirds of its length, was also obliterated, and had become a mere cord. The body of the kidney, which was nearly of its natural size, was made up of a number of cysts, some of which were as large as a filbert. They had no communication with each other, and contained a peculiar kind of chalky looking matter, which was in some of the cysts nearly solid, and in others in a semi-fluid state, like soft mortar. Some of this substance was analyzed by Dr. Prout, and found to consist of 'phosphate of lime, with animal matter.' The opposite kidney was somewhat larger than natural, but its structure appeared to be healthy.

"The other viscera of the abdomen were in a sound state."

The 2nd case is interesting, on account of the injury of structure sustained by the kidney, as well as constitutional sufferings, from the protracted presence of calculi; indicated by excessive pain, irritation, and

hectic, with the occasional discharge of bloody pus, mixed with the contents of the bladder.

"On examining the body after death, both kidneys were found to be larger than natural; and, when cut into, the pelvis and infundibula of each were filled with masses of calculous matter, moulded to the size and shape of those cavities, and surrounded with purulent matter. These masses were of considerable size, and the pressure of their rough and uneven surfaces had excited extensive ulceration and destruction of the secreting structure in both kidneys. The ureters were slightly enlarged, and the coats of the bladder thicker than natural."

Case 3d contains an account of stricture urethra, with enlarged prostate, &c. A false passage had been made by ill-directed efforts to introduce the catheter, prior to admission into the hospital.

"When the body was examined the next day, there was found a large cyst or abscess in the cellular structure, between the peritoneum and the muscles of the abdomen, which extended from behind the pubes nearly to the navel, and was capable of containing a pint of fluid. Its internal surface had a dark, greenish-black colour; and in its cavity was about half an ounce, or rather more, of offensive, ill-conditioned matter, mixed with blood, like that already described. The membranous portion of the urethra was thickened and contracted, and in the upper part of it, anterior to the stricture, there was a false opening, or passage, leading up between the neck of the bladder and the pubes, and communicating with the abscess. This rent had evidently been made by misdirected and too-forcible attempts to pass instruments into the bladder. The prostate gland was enlarged to three times its natural size, and the coats of the bladder were thicker than usual."

Cases 4th and 5th contain nothing worthy of particular notice, in which there is a detail of diseased prostate and abscess in perineo.

Case 6th is one of peculiar interest, as it describes the symptoms and management of suppression of urine from violence done to the perineum. He received a kick on this part from a man's foot, which was followed by profuse hæmorrhage, inability to evacuate the bladder, ruptured urethra, and consequent extravasation of blood in the cellular structure of the perineum.

On the 3d day after the accident he became comatose and jaundiced, and 2 hours before death, which happened the 4th, several oz. of dark coloured offensive urine were passed by the catheter.

On examination, the urethra was found extensively lacerated between the bulb and the prostate gland, and the adjacent cellular structure loaded with dark coagulum. The bladder was empty and perfectly healthy. We subjoin the annexed remarks.

"In this case the suppression of urine probably depended on nervous sympathy, or consent, between the kidneys and the urethra. It came on at the expiration of nearly forty-eight hours after the receipt of the accident, at a time when every thing appeared to be going on in the most favourable way, and destroyed the patient at the termination of about forty hours.

"A jaundiced state of the skin, such as made its appearance in this case, is not uncommon in persons who die of accidents, or after large operations. I have seen it occur in compound fractures, and after amputation."

6. Ascites with Pregnancy.—James Russel, Esq., details a case, in which the process of paracentesis was performed with entire relief in the 6th month of pregnancy. The dyspnœa and cough, which, at first were only palliated by bleeding and purging, completely yielded to tapping. About a month afterwards she was delivered of a weakly child that lived ten days.

We think no one should hesitate as to the propriety and practicability of

this operation in the advanced stages of utero-gestation, provided the symptoms of the case were sufficiently urgent.

Mr. R. states, in conclusion, that in three cases with whose history he was acquainted, parturition commenced a short time after the operation. The first case recovered, and had no return of ascites. The 2nd died from hæmorrhage. The 3d recovered, and had no return of ascites; the woman was delivered of dead twins.

7. Bony Tumour in the Stomach.—Dr. John Webster details this extraordinary case, which is so rare, that Dr. Bailie has observed the formation of osseous matter only on the mucous membrane of the bowels, never in the stomach. The patient was troubled with dyspeptic symptoms, such as irregularity of the bowels, &c. These symptoms would subside, and again recur, at irregular intervals, till one morning, after imprudent indulgence the night before, he was suddenly seized with excruciating pain at the epigastrium, constipation of bowels, quick pulse, and slight nausea. The symptoms became aggravated, and the bowels resisted the most active cathartics, and, after vomiting profusely, the patient died, twenty-two hours from the commencement of the attack.

"Next morning, Mr. Nicholson examined the body, in the presence of Mr. Barrow and myself. On opening the stomach, which was much distended with the fluids taken during the disease, a cartilaginous body, intermixed with numerous spiculæ of bone, nearly the size of a quart-bottle cork, was discovered firmly attached by one extremity to the coats of the stomach, close to the pylorus, into which the other projected like a stopper, thereby preventing any passage into the small intestines. The internal membrane of the stomach was slightly inflamed, as were the peritoneal and mucous coats, at several points of the duodenum and ileum. There were about three pounds of serum effused into the cavity of the abdomen."

Art. XV.—*The Edinburgh Medical and Surgical Journal for October*, 1827.

1. Epidemic Fever.—William P. Allison, M. D., makes some interesting observations on the epidemic fever now prevalent among the lower orders in Edinburgh. After some general remarks, two tables are given, exhibiting the number of fever patients which had been admitted into the Royal Infirmary, and into Queensbury house. In the former there were admitted, from the 1st of November, 1826, to the 31st of July, 1827, 893 fever patients, of whom 76 died, making the average mortality 1 in 11 5-7ths; in the latter, from the 18th December, 1826, to June 31st, 1827, 677, of whom 77 died. The whole number of patients in fever, treated in the two hospitals, during 9 months, appears to have been 1570, of which number 153 died, or 1 in 10 1-3.

The chief cause of the great and rapid extension of fever, during this period, is attributed by Dr. A. to the very distressed condition of a great part of the lower order of inhabitants, in consequence of diminished expenditures, the failure of many speculations in building, &c., which had given employ to great numbers; and thus, immense numbers who were dependent upon their labour for the support of families, were thrown out of employment, and, notwithstanding the active exertions of benevolent individuals, a degree of distress and disease, which we have never, and hope never to witness in our happy country, was the inevitable result in a dense and crowded population.

Dr. A. next states, there has been abundant evidence, that, by whatever circumstances the propagation of the disease may be favoured or increased, "the mode of its propagation is for the most part *by contagion.*" We do

not conceive it necessary to follow him through the evidence which he apprehends to be conclusive on this point.

The following line of distinction of the cases which came under his notice, is drawn by Dr. A., and was, doubtless, highly useful in directing a proper course of treatment, according to the complications of each case.

"Where there has been no threatening of a fatal termination otherwise than by simple asthenia, and no symptoms of local affection which appeared to exhaust the patient, I have called the case simple fever; but where there have been symptoms indicating such a degree of abdominal disease, (generally some form of diarrhœa,) as seemed likely to exhaust the patient, I have described the case as fever with affection of the abdomen. In like manner, where there has been either so much insensibility, (with or without spasms,) as to threaten death by coma, or such violent and continued pain of head, or such active delirium, as are known generally to subside into coma, unless quickly subdued, I have called the case one of fever with affection of the head;—and again, when there has been so much hurried or laborious breathing, with or without cough or pain of chest, as seemed to threaten death by asphyxia, and render the prevention of that mode of fatal termination the chief object of practice, I have called the case fever with affection of the chest."

Of simple fever there were 170 cases, and among these 3 deaths; of cases where affections of the nervous system predominated, 79, and among these 21 deaths; dissection of these cases showed effusion of serum beneath the arachnoid, and in the ventricles, as the only morbid appearance. In this form of fever, bleeding, leeching, cold applications, pediluvia; in the first stage, when active delirium with firm pulse, nauseating and purging doses of tartar emetic; when a comatose state and spasms, blisters, and continued though not violent purging: when nervous symptoms, with manifest weakness of pulse, wine, in small, but often gradually increasing doses, and camphor or ammonia, along with the evacuations, or without them when great depression: where much slighter delirium and restlessness, without pain of head or flushing, opium was of essential service. The above constituted the course of treatment.

Of fifty-eight cases, in which the function of respiration was embarrassed, thirteen were fatal. Besides early bleeding, leeching, and blistering, the remedies that were most useful in cases of this complication, were small doses of tartar emetic, and of ipecacuanha and calomel, with opiates. Many appeared to require an allowance of wine, when they became protracted, and improved under it.

The abdominal affection chiefly observed was diarrhœa, with pain and tenderness of abdomen, sometimes bloody stools, *only one of these cases proved fatal.* Small bleedings, general and local; fomentations and opiates, so as to moderate without checking the evacuations; and mild laxatives, when the stools were slimy and scanty, constituted the mode of treatment in this form of affection.

In conclusion, after alluding to the efficacy of evacuations, Dr. A. says, "I have been more convinced, during the present epidemic, than I had ever been before, of the efficacy of stimulating remedies during a great part at least of those cases of fever, in which, although an evident and dangerous complication of local affections exists, yet the chief danger appears to depend on the general depressed state of the circulation." In illustration, several cases are subjoined

2. Gonorrhœal Ophthalmia.—A case of gonorrhœal ophthalmia, successfully treated, by J. H. Wishart, follows. The patient, a young man, æt. 25, had been affected six days; he had great intolerance of light, severe pain and lachrymation, with copious puriform discharge—chemosis, causing depression of the lower eyelid. He had been freely bled, both gene-

rally and locally. As there was considerable turgescence of the conjunctiva, a circular portion of it was snipped off with the curved scissors; the cut surface bled freely. This practice has been strongly recommended by Spagenberg and Wendt, with a view of rendering the diseased organ secreting the mucus, viz. the swollen conjunctiva, incapable of doing so, by cutting a portion of it out, and allowing it to bleed freely. He was ordered pills of a grain of calomel, and two of hyoscyamus, night and morning; the eye to be bathed with a weak solution of muriate of mercury. Without following the daily detail of this case, we subjoin the annexed quotation as illustrative of the practice of Mr. W.

"In the gonorrhœal ophthalmia, the weak solution of the muriate of mercury is recommended as the best collyrium for washing away the matter from the eye. It requires to be used every hour in many cases. It is most conveniently used with a bit of fine sponge, the eyelids being carefully separated with the one hand, while the liquid is dropped in with the other. It may also be of advantage to use the small syringe, where there is very great tumefaction of the eyelids. After the conjunctiva has been cut out, I consider it preferable to use a mixture simply of vinum opii and elder flower water, made warm. The parts surrounding the eye ought to be always carefully dried after using the eye-water, as any cold evaporation I conceive to be hurtful. The pure vinum opii is to be used as soon as general and local bleeding have subdued the violence of the inflammation. In this stage blisters to the nape of the neck, or to the mastoid process, are of manifest benefit. In general it is fully preferable to apply a succession of blisters rather than to keep them open. The precipitate ointment may be used on the alternate days at bed-time, and when the cornea has ulcerated, the best local application is the solution of the nitrate of silver, from three to five grains to the ounce. When the iris projects, it requires to be touched with the solid cone of caustic; and in cases where it seems not to be acting quickly, I have found great advantage from puncturing the little projection with a cataract needle; the aqueous humour is discharged, the tumour collapses, and is constricted by the edges of the ulcer of the cornea."

3. Hydrocyanic Acid in Chorea.—Two cases of chorea, cured by the hydrocyanic acid, are related by J. Stuart, Esq., of Kelso. The following is the formula employed: ℞. acidi hydrocyanici guttas xxxij. mucilaginis gummi arabici, et aquæ cinnamomi, singulorum unciam. Misce. Two teaspoon-fuls to be taken every second hour.

"To insure the successful exhibition of this medicine, several circumstances must be particularly attended to. Care should be taken that it is genuine. What is purchased in the shops is often far from good. The best way to give it, I believe, is in simple distilled water; or, if it should be apt to excite nausea, in cinnamon or peppermint water; and on account of its great liability to spontaneous decomposition, the mixture should never be made to last longer than twelve hours. I am perfectly satisfied that it often becomes quite inert after standing a longer period. The interval, too, betwixt the doses should not exceed two hours; for the effects of the acid are almost immediate and very transitory; and it is of consequence, in the cure of chorea and other nervous affections, that its effects on the system be never allowed to go entirely off."

(to be continued.)

ANALECTA.

1. Dissection of an Epileptic. [*Bicetre.*]—The following case is published by M. Bosc, of the Bicêtre. A young man, named Lecoq, aged 17 years, an epileptic, was received in the above Institution in the month of December, 1826, and placed in a surgical ward, on account of a caries of the phalanges of one of his fingers. He was of feeble constitution, his limbs but little developed, and his flesh flabby and emaciated. His intellectual powers were almost annihilated, if they did ever exist. He made use of no words, except the monosyllables *Yes* and *No*. The epileptic fits were not frequent. He always slept on his right side in bed, with his head under the coverlet. He complained of no pain, but had a diarrhœa upon him during the three months before he died in the hospital. This complaint resisted all medicines, and was supposed to depend on ulceration of the intestines. The abdomen was extremely retracted. He wasted away gradually, and at length died.

Dissection. The cranium presented a sugar-loaf form. The meninges were sound. There were several depressions on the surface of the hemispheres corresponding to protuberances of the skull; and, in these depressions, as well as in several other parts of the brain, the cortical substance was soft, and almost diffluent. The anterior lobes of the brain were extremely little developed—the circumlocutions small and numerous—the anfractuosities shallow. It was found that the general surface of the brain was softened, as far as the cortical substance was concerned; but, below this, the medullary matter was so indurated as to resemble the white of a hard-boiled egg. This extreme degree of induration was particularly observed over the lateral ventricles. The bottom of the same cavities presented considerable softening of the medullary softening. There was some serum in the ventricles. The cerebellum appeared sound, but was remarkably small. The spinal marrow was not examined. The contents of the thorax were natural. In the abdomen, the peritoneum was found to be the seat of extensive chronic inflammation, the convolutions of intestines being glued together by false membranes. There was a plentiful crop of miliary tubercles developed under the peritoneal covering. The mesenteric glands were in a state of disease. The intestines themselves appeared sound:—their mucous membrane was pale, and somewhat softened; and the mucous follicles were considerably developed in the colon and rectum, but unattended with any ulceration. There was no other change of structure discernible in any of the abdominal viscera, except some equivocal traces of disease in the liver.

The state of the brain sufficiently accounts for the condition of the intellectual faculties, and, on this, doubtless, were dependent the epileptic paroxysms. The state of the peritoneum proves, that chronic peritonitis may go on a long time without showing any very prominent symptom of its existence. The diarrhœa, which continued so long, and which, indeed, appears to have carried the patient off at last, was evidently not the result of inflammation of the mucous membrane of the intestines, to which it is usually referred. It is more probable that, in this case, as well as in many others, it was connected with derangement of the biliary secretion.—*Bibliotheque Med.*

2. Curious species of Cerebral Hæmorrhage. [*M. Bravais. L'Hospice de Bicetre.*]—There is, says M. Bravais, a disease of the cortical substance of the brain, to which anatomists and pathologists have not directed sufficient

attention. It is a hæmorrhage which generally occupies the whole of the cortical substance of the brain, giving place, first, to the formation of some small globules of blood, mixed with the nervous pulp, and afterwards producing yellowish cicatrices, extending from the external coverings of the brain down to the medullary matter. This lesion has an intimate connection with cerebral hæmorrhage. The symptoms, at all times obscure, have not been distinguished when the disease was bounded to a small portion of the brain. They are such as appertain to congestion and softening of the cerebral substance. Sanguineous effusions into the cortical structure are described by all authors; but M. Bravais has not seen any description answering to those yellow membraneous-looking cicatrices which are now to be delineated.

Case 1. Pinard, aged 32 years, presenting, for several years, the symptoms of sombre melancholy, was observed to become rapidly emaciated during the last month of his life, and he complained much of pain in the right side of the chest, without any expectoration. He refused his food, and died on the 5th April, 1824.

Dissection. There was a moderate proportion of blood in the sinuses and meninges of the brain—very little serosity on the surface of the hemispheres—or in the ventricles. The arachnoid and pia mater were transparent, and easily detached from the surface of the brain. In the posterior lobe of the left hemisphere was found a crude tubercle, of small size, which readily turned out with its investing membrane. Around this tubercle, the cortical substance of the brain was reduced to a pulp, of a dark colour, in which the debris of the cerebral structure was discernible, mixed with some globules of blood. The rest of the brain preserved its usual consistence. The lungs, especially on the right side, were filled with miliary tubercles, and the bronchial glands were tuberculous.

The narrator thinks it evident, that the cerebral tubercle, and the hæmorrhagic condition of the surrounding part, came on in the latter stage of this man's existence, and had nothing to do with the melancholic affection under which he so long laboured. Of this, we do not see the evidence so very clearly. Knowing the slow growth of tubercles generally, we do not see any reasonable doubt, that the one situated in this man's brain may have contributed to the disturbance of the sensorial functions.

Case 2. Dupille, aged 50 years, entered the Bicêtre, on the 15th May, 1824, with the following symptoms:—Delirium, loquacity, constant motion of his limbs. The strait waistcoat was applied. *20th May.* Considerable dyspnœa—delirium—coldness of the extremities—feeble and quick pulse—puriform expectoration with his cough. He died on the 29th May.

Dissection. The meninges of the brain were perfectly natural, and the pia mater was easily detached from the subjacent cerebrum. There was a portion of cerebral substance, however, at the under part of the middle right lobe, which was completely impregnated, as it were, with blood, the nervous pulp and blood being intimately mixed. This was in the cortical substance:—The medullary portion underneath was quite sound. In the thorax, a pint of limpid serum was found in the right side—in the left, a pint and a half of sanguinolent watery fluid. There was not any material disease of the lungs, except in one place. The pericardium adhered at one spot, by a false membrane, to the heart. The substance of the heart was soft, and easily lacerable, especially the left ventricle, which tore in two places, merely while handling it.—*Revue Medicale.*

It is evident that the thoracic affections, in this case, were quite sufficient to destroy life. The cerebral hæmorrhage does not appear to have produced either convulsions, or loss of sensibility or muscular power.

A considerable number of other, and nearly similar, cases are related, but we think the above are sufficient to attract the attention of pathologists to this particular lesion of the brain.

3. Fatal Sickness from Pregnancy. [*M. Dance—Hotel Dieu.*]—Morning sickness, especially in the early stage of pregnancy, is so common as scarcely to be considered as any thing more than the effect of a natural sympathy

between the uterus and stomach, Sometimes, however, it passes the usual boundary, and occasions great distress—nay, loss of life. It then becomes a morbid, instead of a natural sympathy, and we are called upon to examine into its cause and treatment.

Case 1. Sophy Pepin, aged 21 years, meagre, nervous, and irritable, entered the Hotel Dieu, on the 15th April, 1826. Three months and more previously, the catamenia had stopped, and, soon afterwards, she was affected with weight and pain in the epigastrium; and considerable derangement of the general health. During the preceding two months, she was harassed with almost constant vomiting of every thing she took, liquid or solid, attended with rapid emaciation. Yet her tongue was clean and moist, without any redness at the sides. The physician who had attended her in the city never perceived any febrile movement in the system. The epigastrium was now void of tenderness on pressure, and only a pulsation rather more than natural could be felt—sleep interrupted—habitual constipation—vomiting both night and day indifferently, preceded by a disagreeable sensation of twisting in the epigastrium. The matters ejected were often of a greenish or limpid character, and small in quantity. The patient did not think herself pregnant, and there was no enlargement of the hypogastric region. Leeches—ice, externally and internally—and various other means had been tried, in vain, to stop the vomiting. The anti-emetic draught of Reverius was tried on the 16th, at the hospital, but ineffectually—opium plaster was applied to the pit of the stomach, with as little success. Twenty other remedies, including leeches and blisters, were put in requisition, without having the slightest effect in checking the vomiting. By the end of May, emaciation had made great progress, and now the hypogastrium began to become prominent, and pregnancy was ascertained to exist. On the 2d of June, this afflicted creature ceased to suffer.

Dissection. No lesion could be detected in the stomach, except a slight reddish tint in the mucous membrane. The whole of the intestinal tube was sound. The uterus rose a few inches above the pubes, and its parietes were preternaturally soft and flabby, but without any other appreciable change of structure. The membranes of the fœtus were transparent throughout; but, between these and the uterus, there were false membranes, forming a layer some lines in thickness, exactly resembling those found between the pleuræ after inflammation. The same was found between the placenta and the uterus, but more of a purulent character.

We cannot but coincide with the author in considering these inflammatory appearances in the uterus as connected with the obstinate and ultimately fatal vomiting which occurred in this case. That the affection of the stomach was purely sympathetic, is evident from the total want of all evidence of lesion in that organ after death.

Case 2. Aglae Leroy, aged 20 years, not married, became irregular in her menstruation in November, 1824, and soon afterwards was troubled with sickness, malaise, cephalalgia, and vomiting of bilious matters. She entered the Hotel Dieu on the 30th December, 1824, and, at this time, she was suspected to be pregnant. The vomitings were very frequent, and there was some pain on pressure of the epigastrium, but no fever. The tongue was moist, and slightly red at the sides. She was cupped on the epigastrium, but without any benefit. Various means were employed to allay the vomiting, but they were attended with only temporary relief. In the beginning of February the sickness was as bad as ever. Her stomach would retain no kind of food, and she expired, exhausted, on the 13th of the same month.

Dissection. The emaciation was great—no appreciable lesion in the head or thorax—some red and softened spots near the cardiac orifice of the stomach. The uterus rose some inches above the pubes, and its parietes were exceedingly thin—scarcely a line and a half in thickness. They were also very soft, and gorged with blood. The membranes were transparent—the embryo appeared to be about three months old—there was no other appearance of disease.

The lesion in the stomach could hardly be considered as capable of producing

such a catastrophe, and therefore we may fairly attribute the patient's death to the sympathetic vomiting. These two cases would, in our opinion, suggest a particular modification of treatment in the obstinate vomitings which we occasionally meet with in pregnancy—namely, repeated applications of leeches to the groins and labia pudendi. We throw out this hint for our obstetrical brethren, who have most frequent opportunities of putting the hint in practice, if they deem it proper.—*Repertoire.*

4. Remarkable Disease of the Epiploon.—The following melancholy case is recorded by Strambio, in an Italian journal, (*Annali di Med.*) with the appearances on dissection.

A young woman, 18 years of age, after enjoying herself at a carnival ball, began to complain of pains in the right side of the abdomen, which increased in size, and led to the suspicion that she was pregnant. Various medicines were ineffectually administered, and when M. Strambio was consulted, the patient presented the following phenomena:—face pale—pulse hard and frequent—skin burning hot—vomiting when food was taken into the stomach—abdomen large, but more so in the right than in the left side. On examination, several indolent tumours were felt, which were not painful unless strongly pressed. The left mamma was shrunk, and the right more enlarged than natural, as well as hard. There was supposed to be inflammation of the stomach, and depletion was practised, locally and generally, with fomentations, &c. It was found that a tumour pressed on the rectum, and prevented the introduction of a pipe, or the finger. All the symptoms increased in severity, and hydrothorax supervened, with infiltration of the left lower extremity. Death soon took place.

On dissection, a large effusion was found in the chest and also in the pericardium. The omentum, detached from the viscera to which it naturally adheres, was degenerated into an elastic substance, resembling brain rather than fat, occupying the whole of the abdomen, and disposed into masses of various sizes, connected by prolongations of the original omentum or membranous strips. The left kidney, the spleen, the abdominal aorta, the rectum, the ovaries, and the uterus, were involved in this morbid mass. The other organs were unaltered. The disease was considered to be caused by a chronic phlegmasia of the epiploon, excited by a fall which the young woman had experienced about a year before her death.

5. Purulent Ophthalmia.—In our last number we mentioned that Dr. Varlez, of Brussels, had used the chloruret of oxide of calcium with great success in purulent ophthalmia. It appears by a letter from Mr. Guthrie, in the November number of the Medical and Physical Journal, that the latter gentleman has lately tested the chloruret at the Eye Infirmary, and three cases are detailed in illustration. Mr. Guthrie first employs copious venesection, and then applies the solution of the chloruret, (as made by Garden, in Oxford street,) three times a day, by means of a brush, keeping the eyes covered afterwards with cloths wet with cold water. Purgation, with calomel, salts, &c. is also steadily employed. Mr. Guthrie seems to acknowledge the utility of this application as an auxiliary to depletion, sanguineous and intestinal.—*Johnson's Journal for Jan.* 1828.

6. Gangrene of the Feet from obstructed Aorta.

Case. Count C———, aged 67 years, of athletic constitution, keen appetite, and a very hearty eater, had always kept himself in a state of plethora, with tendency to cerebral congestions and gastric irritation. From these affections he was usually relieved by sanguineous depletion, especially leechings; but his appetite being too powerful, he was never sufficiently guarded in his diet. In the autumn of 1826, the Count became subject to an unpleasant sensation of heat in his feet, particularly when walking, which obliged him, after a promenade, to put his feet on cold marble to allay the heat. In the month of December, of the same year, the patient was seized with acute pain in one of his hams, which was removed by leeches. Next day, the pain settled on the tendo-achillis and neighbourhood, and appeared of a gouty nature, there being some swelling and redness. One evening, after a rather too free dinner, and a glass

or two of strong wine, the pain became greatly exasperated, attended with quick pulse and hot skin. Leeches were applied without relief, and an attempt was made to bleed from the arm, but without success. The pain increased—delirium came on—with constant jactitation, and screaming. On examining the part, some vesications were seen, and soon afterwards gangrene manifested itself unequivocally. A troublesome hiccup now supervened, and could not be stopped. In the course of a few days the gangrene had invaded the whole of the leg—the patient became comatose—black spots appeared on the other extremity, and death closed the scene.

Dissection. The heart was found enveloped in a thick layer of fat, and intimately adherent to the pericardium throughout. The organ was flaccid, softened in structure, and its cavities dilated. The semilunar valves of the aorta were ossified, and the vessel itself considerably dilated, especially at its arch. About an inch and a half below the origin of the cœliac artery, the aorta became completely ossified, and its bore almost entirely obliterated. There were only two small passages for the transmission of blood, not more than half a line in diameter each. The iliac arteries were also interrupted, and nearly obliterated in several places. The femoral, or rather the inguinal arteries, about the crural arch, were rather dilated, thickened in their coats, and much ossified. Below the crural arch, the left femoral artery was merely thickened, whilst that of the other side was red, and filled with clots of different degrees of consistency. The vessels of the mortified parts participated in the condition of the surrounding soft tissues. The veins of the lower extremities were thickened, and obstructed. There were various marks of inflammation and thickening in the stomach and bowels, with considerable serous infiltration into the ventricles and between the membranes of the brain.—*Broussais' Journal.*

7. Pericarditis and Hypertrophy of the Heart in a Child.—Dr. Menara has published an interesting case of this kind, showing at how early a period the heart may become enlarged in children.

Case. A female infant had, from her birth till the age of five months, enjoyed apparent good health. Five of her brothers and sisters had died of cerebral affections. In the beginning of January, the little patient caught cold, which took on a more severe character than usual. On the 12th her breathing was oppressed, pulse full and hard, skin hot, cough frequent, but moist. She sucked with avidity, but often vomited. 13th. Better in all respects; the chest sonorous throughout. 14th. A strong exacerbation, preceded by a cold stage. The abdomen became distended and tender—cough, attended with oppression and râle. *Emollient drink—blister to the arm.* 15th. Respiration more oppressed than ever. *Blister to the other arm.* The breathing was wheezy (ralante) in both lungs—and, on percussion, there were some dull spots beneath the scapulæ—pulse 140. These symptoms increased in intensity, and the child died on the 17th.

Dissection. The cranium was more ossified than usual at so early an age, the sutures being firm, and the anterior fontanelle closed. The brain was sound, but very voluminous, as was the spinal marrow. The lungs adherent by layers of albuminous concretion, with some serous effusion in the right side. The lower portions of the lungs were hepatized—the superior portions sound. The mucous membrane of the trachea and bronchia was rather thickened, and the tubes loaded with mucosities. The pericardium was found distended with gas, and also contained about two ounces of reddish serum. In several places, on the internal surface of the pericardium, reflected and non-reflected, there were layers of an albuminous secretion, some of them three or four lines in thickness. The pericardium itself was considerably thickened. The heart was one third larger than natural, this increase of size being produced by an inordinate thickness of the parietes of the organ.—*Tours Medical Journal.*

8. Epidemic of Groningen. *By Professor Barber.*—The city of Groningen suffered a dreadful visitation of epidemic fever in the years 1825 and 1826—especially in the latter year, when 2443 men and women fell victims to the reigning malady. Looking geographically at the soil and climate of Holland,

intersected as it is by innumerable rivers and canals, and with such a large portion of its surface on a level with, or even below the level of the sea, one would be led to expect that the inhabitants, crowded as they are, would enjoy a much shorter range of existence than in other countries, as France and England for example. Yet, history proves to us, that the range of life is longer in Holland than in France—and that epidemics are comparatively rare. Thus, in France, it is found that, out of every 38 individuals, one will annually pay the debt of nature; while in Holland, it is one in 42—in Belgium, one in 48—and in the province of Groningen, where the late mortality prevailed, it is only one in 49 and a half. This seems the more astonishing when we contemplate the many local causes which ordinarily give rise to fevers and other diseases throughout the world. The sources of miasmata must be more numerous in the low countries than in almost any part of the earth; but then, the *low temperature* of the atmosphere fortunately checks the evolution of these deleterious agents, and thus preserves the inhabitants from a terrible enemy, as nursed under brighter skies and more delightful climates. Every now and then, however, an inundation of the soil or an extraordinary range of atmospheric heat, calls the pestiferous miasms into full activity, and then, as at Walcheren or Groningen, the mortality is terrific.

During the autumn of 1825, mild tertian and quartan fevers were seen in the city of Groningen, which continued to prevail during the winter, and also in the spring of 1826. But it was not till the month of June of the latter year, that the mortality became at all alarming. At this period, a diarrhœa, of a fatal nature, began to prevail, especially among children. By the middle of July, the epidemic became formidable, taking the gastric and bilious characters, accompanied by violent cephalalgia. It was clearly, however, of the *intermittent* type, though sometimes only remittent. The diarrhœa was, during one month, the prominent feature of the epidemic; but, about the middle of August, the tertian form of the fever was unequivocal, sometimes changing into the double tertian type—a change by no means advantageous to the patient. During the next two months, the malady raged with great intensity and fatality.

The disease, at this period of its acmé, commenced with a rigor of short duration and moderate in degree—slight acceleration of pulse—pains in the head, loins, and limbs, especially in the lower extremities. The tongue was furred, and the patient had bilious vomitings, sometimes during the cold fit—sometimes at the close of the paroxysm. These spontaneous vomitings were the means by which nature got rid of large bilious secretions, but they were not indications for the administration of emetics or strong cathartics, which generally proved injurious. On the contrary, gentle excitants were more efficacious in removing the diarrhœa and gastric irritability. But the sulphate of quinine was still more serviceable. This specific almost always succeeded, provided it was given in the dose of fifteen to twenty-five grains in the course of the apyrexia. If, instead of this treatment, nature was left to her own efforts, or the disease was attended with sanguineous evacuations or drastic purgatives, the patient generally died apoplectic in the next paroxysm, or fell into a state of coma or dysentery, with delirium and prostration of strength, that ultimately proved mortal in the majority of cases. There were few, if any instances, where the fever degenerated into the typhoid or putrid form, although thousands of unfortunate patients never had any medical assistance whatever, or only some trifling remedies unskilfully administered. In respect to crises, there were few opportunities of observing this operation of nature, since the most strenuous exertions were made by the physicians to cut the disorder short by remedies, especially the sulphate of quinine. Still, they had occasion to observe a few instances where the fever seemed to terminate by critical sweats, diarrhœa, vomitings, or copious depositions in the urine. The disease was invariably of an asthenic character, and never inflammatory. This, they think, was proved by the symptoms, by the treatment, and by the termination. They do not add—by the *dissections*. But of this hereafter.

Relapses were very common, nay, almost inevitable. The reasons were two-

fold—the protracted debility of the subjects, and a continuance of the original miasmatic causes. Dropsy was a very common sequence of the fever, and came on very suddenly. It was sometimes anasarcous—sometimes ascitic. The disease sometimes terminated in a singular eruption of chronic aphthæ on the tongue and throat, evincing their existence also in the œsophagus and stomach by acute pain in those parts, or a copious secretion of viscid mucus. There was, also, an occasional eruption on the surface of the body, in various parts. The debility of intellect, as well as of body, left by this fever, was sometimes so great, that the patient was entirely deprived of memory for a considerable time after the cessation of the fever.

Appearances on Dissection. As the epidemic presented a great uniformity in its symptoms, so there was a corresponding uniformity in the *post-mortem* appearances. Dissections, however, were not so numerous as could be wished, owing to the extent of the mortality, and the inability of the physicians to attend to pathological investigations. Nevertheless, Dr. Hendricks, physician to the public hospital, opened 107 bodies, and communicated the results to the authors of the paper under review. A table is given of the different appearances on dissection; and we find, that the spleen suffered much more than any other part. Thus, there were 66 bodies presenting inflammation of this organ out of 107. Next to the spleen, the liver bore the onus of disease among the abdominal viscera. Thirty-two bodies showed this species of lesion. In the whole number of dissections, (107,) there were 26 cases where the digestive tube was inflamed, either internally or externally. Forty-two bodies showed affection of the brain or its membranes, or serous effusion into the ventricles or between the meninges. Thus, each theorist had something to support his doctrine, but nothing to confirm it. Broussais and Clutterbuck would have found it difficult to maintain their exclusive hypotheses from these documents. There is certainly more to support the doctrine of fever being a general disease in the beginning, and taking a local determination in the course of the malady. Of the 107 patients above mentioned, 20 exhibited, during life, symptoms of disturbance in the cerebral and nervous system—23 had dysentery—14 had diarrhœa—13 showed signs of putridity—and 16 were dropsical before they died.

Nothing transpired during this epidemic to sanction the idea of its possessing any contagious character. Between 30 and 40 medical men (physicians) were busily employed, but none of them died. Some of them were taken ill, either from fatigue, or subjection to the same causes of disease with their patients.

In respect to the remote causes of the epidemic, they were ascribed, *first*, to an unusual increase of aqueous emanations—*2ndly*, to the high temperature of the summer heat, which greatly augmented the said emanations—*3dly*, to the sudden vicissitudes of temperature—*4thly*, to the drying up of many marshy plains and pools, by which a great surface of mud, &c. was exposed, and a copious disengagement of miasmata effected.

From the above causes, resulted a bilious fever, early in the spring, which soon changed into a pure intermittent, and afterwards into a remittent, with affection of various viscera. The same remedy (the sulphate of quinine) succeeded throughout all these changes and seasons—"and many hundreds of the citizens of Groningen would have been saved, had there been a sufficient supply of this invaluable febrifuge."

Groningen contained about 28,000 inhabitants previously to the epidemic, and during the months of August, September, and October, 1826, there were not less than 8,000 people affected with the fever—or more than a fourth part. Of these, 569 died in the above period, or about 1 in 14.

The city of Groningen presents large and beautiful streets, so that, at first sight, it might be considered a most healthy situation; nevertheless, it incloses within its walls many powerful causes of disease. One quarter of the city is too much crowded in its population, and there the epidemic raged severely. But this part is not inhabited by the lower orders—therefore the cause of sickness could not be attributed to want of cleanliness, good food, &c. But there was another cause, the immediate vicinity of the canal which leads to the sea,

and from whose bottom and edges miasmata were doubtless disengaged, though not in any very large quantity. This city, however, is exposed to a still more powerful source of miasmata, namely, the numerous cloacæ which are every where met with. These cloacæ are always filled with animal and vegetable matters in a state of putrefaction, and, in the hot weather, disengage an immense quantity of stinking effluvia, which contain, without doubt, the seeds of fevers and other diseases. This terrible epidemic will probably induce the local authorities of the place to pay more attention to the state of drains, canals, and common sewers, in order to guard against another visitation of so terrible a scourge. —*Journ. Gen. de Medecine, April*, 1827.

9. Pneumo-phthisis Cyanotica.—In the 4th number or volume of our respected cotemporary, the Journal de Progres, there is a short article under the above head, extracted from Hufeland's Journal for February, 1827. This terrible affection (pulmonary phthisis with the blue disease) has engaged the attention of Professor Schonlein, who has described it minutely. It is generally developed at the age of puberty, and is rapid in its course, rarely continuing more than three months, and is remarkable for the affection of the venous system, the pulsations of the heart and arteries, (which are not always synchronous with each other)—by the blue colour of the face and lids—the narrowness of the chest —the meagreness of the extremities, except at the tips of the fingers which are generally swollen, and the great incurvation of the nails. To these symptoms succeed cough, pain in one or both sides, oppression about the chest, expectoration, at first sanguinolent, and afterwards purulent, accompanied by hectic fever in the last period of the disease. It differs from common pulmonary phthisis by the rapidity of its course, by the want of general emaciation, the dryness of the skin, the paucity of expectoration, the constipation of the bowels, and the cerebral phenomena.

The effective cause of the malady is *non-obliteration of the foramen ovale*, which experience has shown to be more frequent in the female than in the male. It is thought that it is sometimes owing to hereditary disposition, as it is found that the children of parents who have organic diseases of the heart, are apt to be similarly affected. There are some other predisposing causes enumerated, but we do not deem it necessary to notice them.

On dissection of subjects who die of this disease, we generally find the venous system of the brain gorged with blood, the ventricles distended with serum, and *one or both phrenic nerves swollen and indurated, or else in a state of atrophy.* In the heart, the foramen ovale is open. The blood throughout the whole system is found quite liquid—the lungs partially ulcerated—the liver enlarged.

The cure of the disease is beyond the reach of art, since we cannot remedy the malformation of the heart, on which it mainly depends. But the author thinks that something might be done by getting the individual past the period at which the disease usually terminates fatally. This is to be done by the greatest repose —by avoiding aliment of a hydrogenated quality—by living chiefly on vegetables and water, &c. And as the oxygenation of the blood in the lungs is very imperfectly performed, this defect is to be remedied as much as possible by soliciting the action of the other secretory organs with which the lungs are in accordance, as the kidneys, liver, skin, &c. At the same time, the respiratory organs are to be guarded by the greatest attention to a regulated temperature, and defending them from catarrhal affections. We shall now give some particulars of a case in illustration of this formidable disease.

Case. A. Gotleib, aged 16 years, was said to have enjoyed good health till the year preceding, when he became affected with pains in the left side of the chest, dry cough, dyspnœa, and fever. The village barber was called in, who practised a large bleeding from the arm. This measure diminished the pain in the side; but the other symptoms continued the same. On the 28th January, the tenth day of the illness, the author was called in. He soon discovered the radical defect in the central organ of the circulation—as evinced by the usual symptoms of cyanose, described above. The pain in the side had now returned, and the difficulty of breathing amounted almost to orthopnœa. The fever was slow, the

expectoration mucous, the appetite gone. Quietude, aqueous drink, and vegetable diet, were prescribed; while digitalis, nitre, hyosciamus, &c. were ordered. In a few days, the oppression and pain were diminished, but the expectoration had become sanguinolent, and the fever was increased every evening. Eight grains of calomel were given night and morning, in order to procure stools. 3*d Feb.* The expectoration is now pure blood; but the cough and oppression are somewhat relieved. Acids were given, and a tepid muriatic acid bath ordered once in 48 hours. By these means the hæmoptysis was checked; but purulent expectoration succeeded. On the 26th March, there was another discharge of blood from the lungs, and life was threatened. Venesection and acids again stopped the hæmoptysis; and again the purulent expectoration became copious. The disease now made rapid progress, and the patient was carried off early in May, having evinced, for some time, considerable disturbance of the cerebral system.

Dissection. The venous system of the brain was gorged with blood—some serous fluid was found in the ventricles. The lungs were gorged in several places with blood, especially the upper part of the left lung, where there were several recent abscesses. The phrenic nerves were enlarged and indurated—and the left par vagum reduced to a kind of bouillie. The pericardium contained serum—the foramen ovale was open—the two auricles were prodigiously enlarged, but all other parts of the heart were natural. The liver was enormously enlarged, and quite lacerable.—*Journ. de Progres, No.* 4.

10. Baron Larrey on Fractures.—By a private communication, we learn that the above mentioned veteran has projected, and makes use of, an extraordinary dressing for fractured limbs. He encircles the whole of the member with compresses and bandages, soaked in gummy or albuminous substances, which, on drying, form a complete, immovable, and inflexible case for the injured limb. This he applies whether the fracture be simple or compound, and never takes it off till the cure is completed, whatever may be the degree of swelling, infiltration, or even suppuration, that supervenes. The swelling is either prevented, or subsides, without danger—the infiltrations or suppurations are absorbed—and the process of re-union goes on safely. We think it not improbable that, in simple fractures, this plan may have some advantages over the splints and bandages now in use. Baron Larrey's apparatus forms a complete shell or mould, that adapts itself to every part of the limb's surface, and thus forms a more permanent and imperturbable case for the member, than any apparatus which can be constructed of splints. There is this advantage, also, that the member is never disturbed by subsequent examinations or adjustments—a frequent source of displacement of the bones. But how far this apparatus will apply to compound fractures, especially where there is much laceration of the soft parts, or shattering of the bones, we will not venture to say. We should suppose that it never can become generally applicable in such cases. We understand, however, that some of the Parisian surgeons are adopting the plan of the Baron.—*Vide Journal de Progres, vol.* iv.

11. Blindness from a Blow on the Fifth Pair.—*Case.* W. Carter, aged 38, was received into Guy's Hospital, on the 10th April, in consequence of a severe blow on the right superciliary ridge of the os frontis, by the handle of a whip, followed by tumefaction and ecchymosis. On examination it was ascertained that the iris was not lacerated, nor was there any turgidity of the humours. There was much pain about the supra-orbital foramen, extending in the line of the nerve on the forehead. The power of vision was entirely lost in that eye—the pupil dilated—the iris entirely insensible, as was the retina. By cupping, purging, and mercury, carried to ptyalism, the transparency of the humours (which had become a little turbid) was restored, but vision appears to be lost for ever.—Dissector.

If the blindness, in this case, results entirely from the blow on a branch of the fifth pair, and without any direct injury to the humours, retina, or optic nerve, it is very curious. But, for our own parts, we do not think this is the case. We conceive that the retina was injured by the blow.

12. New Remedy for Asthma.—Whoever is conversant with this distressing complaint, knows with what eagerness the afflicted patients fly to the window for fresh air, when attacked with a paroxysm of asthma. They experience relief from this procedure, or they would not have recourse to it. Indeed, it appears that, in pure spasmodic or periodical asthma, there is a peculiar constriction of the air cells and finer bronchial tubes, which prevents the ingress of the atmosphere, and threatens suffocation. Impressed with this idea, which is certainly a natural one, Dr. Chlarenti, an Italian physician, himself a victim to this disease, had recourse to the insufflation of atmospheric air, by means of a common pair of bellows, in his own person. He introduced the pipe of the instrument into his mouth, and, closing the nostrils, he pushed the air forcibly into his lungs, and with instant relief. He continued the operation for a considerable time, and still with the same good effects. By this remedy, he put a speedy period to the paroxysm. He then extended the trial to others, under similar circumstances, and with similar benefit. After a mass of experience with this remedy, he comes to the conclusion, that the artificial insufflation of atmospheric air is not only a means of putting a speedy termination to the paroxysm of asthma, but of radically curing the disease, if organic alterations have not taken place in the lungs.—*Journal de Progres.*

13. Ingestion of Hot Water in Gout.—In a former Number of this Journal, we alluded to a strange practice introduced by M. Cadet de Vaux, namely, the swallowing immense quantities of hot water for the cure of gout and rheumatism. Dr. Kruger has recently stated a case where this plan was tried by a patient, and the following were the effects.

M. Scholz, aged 47 years, began to have gout in May, 1821, which continued to recur, in slight paroxysms, till March, 1826, when they were rather severe. He now read M. Cadet's work on hot water, and determined to test the remedy. On the 20th March he began with a tumbler of water as hot as he could drink it, every 15 minutes. The first few glasses threw him into a perspiration, which continued till he took the 30th dose, when nausea and vomiting supervened. He persevered with the hot water till he completed the 38th glass, (each contained about seven ounces) when his head began to turn, and he was unable to take any more. Epileptiform convulsions succeeded—and all the superficial veins of the body were remarkably distended—respiration stentorous—pulse unaffected—perspiration copious. Some æther was first given, and then 20 grains of ipecacuan., which did not vomit; neither could the bowels be moved by lavements. The patient had no power over the sphincter ani or the bladder. Diffusible stimuli were next given. Vomiting took place four hours after the exhibition of the ipecacuan., and was succeeded by a paroxysm of convulsions that left the patient in a state of great exhaustion, and complete privation of intellectual powers. Another convulsive paroxysm was followed by a few hours sleep, from which he awoke with renewal of intellectual functions, but without any recollection of what had passed during the indisposition. The gout, which had been seated in the great toe at the commencement of the imbibition of warm water, had now disappeared, and did not return for that time. The patient, however, experienced great debility for a considerable time afterwards, requiring a long course of tonics.

Another case is related by Dr. Kruger—that of an apothecary who, having had some distressing dyspeptic symptoms, became affected with gout. In a paroxysm of this last disease, in which the whole body was affected; with heat in the stomach, palpitation of the heart, constipation, and jaundice, the patient had recourse to the Sangrado practice, being tired and disgusted with medicine. He swallowed 40 glasses of hot water, each containing 7 ounces. The consequence was, an immense distension of the body—congestion about the head, delirium, vomitings, copious perspirations, and urinary discharges, &c. by which his strength was greatly exhausted, and his life put in imminent danger. The gout, in this case, did not subside from the feet, and it was a long time before he was able to walk.

These effects of copious ingurgitation of hot watery fluids are curious and

interesting to the physiologist and pathologist. It is evident that a considerable portion, at all events, of the water must have passed through the circulation, and the effects on the brain were nearly similar in both cases. In the latter case, the abundant perspiration and urinary secretion may have prevented the paroxysms of convulsions, which were so conspicuous in the first patient.—*Johnson's Journal for January*, 1828.

—

14. Preservation of Cantharides.—It is stated by M. Farines that the active part of cantharides exists only in the soft organs of the insect; that these are the parts which are attacked by a species of acarus, and that in this way the cantharides are injured. Camphor has no power in preventing the attacks of the acarus; but M. Farines believes that pyroligneous acid will be found effectual, and proposes to prepare cantharides with it, and even to kill them at the time when they are collected by submersion in it.—*Journal of Science.*

—

15. *Method of increasing the Odour of Roses.*—For this purpose, according to the author of the method, a large onion is to be planted by the side of the rose tree, in such a manner that it shall touch the foot of the latter. The roses which will be produced will have an odour much stronger and more agreeable than such as have not been thus treated, and the water distilled from those roses is equally superior to that prepared by means of ordinary rose leaves.—*Ibid.*

—

16. Cases of long-continued Luxation, *in which severe mischief arose from the attempt to reduce the Parts. By* M. Flaubert, m. d. &c. &c. *Repertoire d'Anatomie, tome* 3, *No. I.* 1827.—From five of the cases related by M. Flaubert, it appears that the advice given by many authors to attempt the reduction of dislocations of long standing cannot be acted upon without considerable risk. We are aware there is no novelty in this fact, but we are inclined to believe it is not unfrequently lost sight of, and that very injudicious and violent attempts are sometimes had recourse to at the risk of much injury, and with but little probability of restoring the parts to their natural position. The longer the dislocation has existed, and the greater the degree of inflammation and swelling which has succeeded the accident, the greater will be the danger of inflicting serious injury by the after attempts at reduction; for the muscles as well as the arteries are weakened, and perhaps softened, by the previous inflammation, and are hence less capable of resisting any great efforts to reduce the parts. M. Flaubert is inclined to infer, from four of the cases he has related, that paralysis of the arm, which is often attributed to luxation of the bone, is rather to be attributed to the violent attempts to reduce the dislocated joint.

—

17. Case of Infibulation, *followed by a Schirrous affection of the Prepuce.*—The practice of infibulation, which originated from the passion of jealousy, and which, in the ages of barbarism, was imposed by the stronger upon the weaker sex, might have been thought to be now altogether confined to the imaginary personages of La Fontaine's Tales. No trace of it can be discovered in modern times. One example, however, of the kind has occurred to M. Dupuytren; and it is remarkable that it was in the person of a man whose mistress had induced him to submit to this very unusual mode of resisting any disposition he might have to inconstancy. Some years ago M. Dupuytren was consulted by Dr. Petroz, upon the case of M. ——, the head of one of the most important manufactories in France. He was about fifty years of age, of a strong and good constitution. For a long time he had an abundant and fetid discharge from the penis; he made water with difficulty: the prepuce was much swollen, hard, and ulcerated in different parts. So far the case presented nothing remarkable; but the curiosity of the attendants was strongly excited by observing that the prepuce had been pierced through in several places, and that the aperture and borders of these small orifices were completely covered by a perfectly organized cutaneous tissue. M. Dupuytren determined, before he proceeded to any

decisive mode of treatment, to ascertain in what manner these perforations in the prepuce had happened. The patient stated, that, when a young man, he had visited Portugal, where he had remained several years. He there formed a tender *liaison* with a young female of strong passions, and equally strong jealousy. He was devotedly attached to her, and she acquired over him the most absolute influence. One day during the transports of their mutual passion, he felt a slight pricking sensation in the prepuce; but, having his attention completely abstracted by the caresses of his fair mistress, he did not even examine from whence arose the disagreeable feeling he had experienced. But, on retiring from the embraces of the lady, he found the prepuce secured by a little golden padlock, *artistement travaillé*, of which she had kept the key! It would appear that the lady was not deficient in eloquence, for she kept her lover in good humour by her rhetoric, assisted, indeed, by occasional caresses, and persuaded him, not only to permit the padlock to remain, but to consider it a very ornamental appendage. She even gained permission to re-apply it each time, that the skin which was pierced appeared weakened; and, however incredible it may seem, she at length, "to make assurance doubly sure," put on *two* locks. M—— remained in this state for four or five years, constantly wearing one or two of the locks appended to the prepuce, the key of which was of course taken especial care of by his mistress. The consequence ultimately was that the prepuce became diseased, and a cancerous affection was threatened, when M. Dupuytren was consulted. The safest and most effectual course was then adopted. The prepuce was removed by an operation nearly resembling circumcision. Under the care of M. Sanson, the cure was complete in less than three weeks. The patient has remained in perfect health.—*London Med. and Phys. Jour.*

—

18. Detachment of the Placenta *by injection of the Funis.*—In the fourth volume of the *Journal des Progrès des Sciences Medicales*, Dr. Taroni has related a case of retention of the placenta, in which the umbilical cord was injected with water, and the separation and expulsion of the after-birth quickly followed. The case, as it is related by Dr. T. would admit of many remarks as to the propriety of the practice which was adopted, but it is our object at present merely to record the possibility of carrying this plan into effect, and to show that, where the placenta is retained in the uterus, it may be thus separated. If cold water had not been found sufficient, a proportion of vinegar would have been added. In about two minutes after the injection of the funis, the placenta was entirely expelled. We are informed by Dr. Hopkins, that he has had recourse to this plan in two instances, with an equally-favourable result. The patients would not permit the introduction of the hand, and pressure upon the uterus, the application of cold, &c. having been tried to no purpose, about eight ounces of water were thrown up the funis with a common syringe. In two or three minutes uterine contractions took place, of which there had been previously no symptom, although two hours had elapsed after delivery, and the placenta was expelled into the vagina. Although we do not imagine that this mode of treatment can be frequently necessary in cases of retained placenta, the fact is worthy of being recorded, as it is always advantageous to increase our means of affording assistance, however seldom their employment may be required.—*Johnson's Journal.*

—

19. Cases of violent vomiting *occurring at the commencement of Pregnancy, and appearing to depend upon a morbid state of the Uterus and Ovum. By* M. Dance, m. d. *Aide de Clinique a l'Hotel Dieu.*—At the commencement of pregnancy, females occasionally suffer from very violent and continued vomiting, which sometimes produces exhaustion and even death. The object of M. Dance is to ascertain the cause of the vomiting, and to determine the most rational mode of endeavouring to relieve it. He is inclined to believe that this very distressing symptom is less dependant upon the sympathy of the stomach with the uterus while in a healthy condition, than upon a low degree of inflammation, either of the uterus itself, or the membranes of the ovum. He would not, however, be inclined to form a decided opinion from the two cases which he has related, although they have been deemed

sufficiently interesting to be recorded. In the first case the vomiting continued for three months, without any symptoms of fever, and destroyed the patient. Upon dissection, the membrana decidua was found in a state of inflammation. The stomach was perfectly healthy. In the second case, the vomiting also continued for upwards of three months, when the patient sank and died. The parietes of the uterus were found, upon examination, in a softened and diseased state. In the tissue of the womb there was also a decided engorgement of blood. The membrana decidua, also, was more vascular than common. The appearances of lesion in the stomach were but trifling. In each of these cases a variety of internal remedies and local applications were had recourse to for the purpose of arresting the vomiting, but with little or no avail. M. Dance observes, that if it were permitted to draw general conclusions from the limited evidence he has afforded, it might be inferred that the vomiting which occurs at the commencement of pregnancy, and which so obstinately continues in spite of the best directed treatment, is to be considered as a proof of a sub-inflammatory state of the uterine system. It is suggested, therefore, that it would be more rational to oppose the continued vomiting by antiphlogistic means applied to the region of the uterus, than to direct our attention solely to the stomach, which is but secondarily affected.

It has never fallen to our lot to lose a patient in consequence of exhaustion from the almost-incessant vomiting which not unfrequently occurs during the first months of pregnancy; but we have rarely succeeded in effectually relieving it by any treatment we have adopted. The observations of M. Dance are certainly worthy of attention.—*Repertoire d'Anatomie.*

—

20. Preternatural Anus *cured by Pregnancy.*—This case is related by Dr. Wedemeyer, of Hanover. A woman, thirty-two years of age, had a stercoral fistula, for seven months, in the right groin, following a crural hernia which passed on to gangrene. It was treated for some months by compression with sponge, &c. but without any benefit being derived; for it always remained in the same state. During this time, conception took place; and as pregnancy proceeded, and as the uterus ascended in the abdomen, the fecal discharge diminished, and was augmented in the same proportion from the natural anus. During the last months of pregnancy the preternatural opening discharged nothing but a little pus and serum. The woman was delivered seventeen months after the commencement of the disease; and two months after her accouchement the preternatural opening had completely closed.—*Journ. für Chir. und Augenheilkunde.*

—

21. Cesarean Operation, *successful case.*—Dr. Lantz (*Gemeinsame deutsche Zeitzchr. für Geburtskunde*, tom. i,) performed this operation on a woman, thirty-one years of age, who had been delivered, eighteen months before, of a monstrous fœtus, which had not arrived at maturity. The mother did not recover her health for six weeks after this delivery. The second pregnancy was normal. Labour commenced equally with normal contractions; but on examining the pelvis, it was found that the sacro-pubic diameter was only two inches and six lines. The other diameter was natural, and the conformation of the pelvis was generally good, with the exception of the great angle formed at the sacro-vertebral junction. The operation was performed two days after the commencement of the uterine contractions, the strength of the patient being still very good. Nothing particular occurred during the performance of the operation; and it was attended with complete success. The infant was alive, and continued to live; and the mother was well in five weeks, notwithstanding some great faults which were committed respecting her regimen, and which had menaced her life. The operation was performed in the common way, that is, by longitudinal incision.—*Bulletin, &c. Sept.*

—

22. Erysipelas *cured by Nauseating Doses of Tartarized Antimony* —The following case has been sent to us by an anonymous correspondent:—

Mrs. W ——, Dowgate, sent for me two years ago, when she was labouring under a recent seisure of erysipelatous fever. The eyes were closed, and the head was

preternaturally enlarged. I determined to rely solely on the use of emetics and nauseating doses of tartarized antimony. The first dose operated as usual, by emptying the stomach; the patient was immediately restored to sight. Succeeding doses, frequently repeated, only nauseated; and in three days the patient was well. Now although this is only an isolated case, it may be well to remember, that we are not wholly at a loss for some probable remedy whereon to rest our hopes; whereas formerly, we chiefly relied upon almost unaided resources.—*Medical Repository for December*, 1827.

—

23. *Calcined Magnesia.*—M. Robiquet has found out a new way of obtaining this article at less time and expense than attend the usual mode of preparing it. It consists in wetting and pressing strongly in a cloth some carbonated magnesia, in order to form a cake of a smaller volume, and then of calcining it. M. Robiquet has thus obtained, in an hour and a half, from thirty ounces of carbonate of magnesia, twelve ounces of burnt and dense magnesia. He objects to the opinion, that this is not so sweet and fine as that made in England.—*Archives Générales.*

—

24. *Sulphate of Jalapine.*—M. Pelletier has examined the pretended sulphate of jalapine of M. Hume, and found that it is an entirely inorganic salt, composed of sulphate of lime and sulphate of ammonia. But M. Guibourt, who also has examined a portion of it, thinks it to be composed of sulphate of magnesia and of ammonia.—*Ib.*

—

25. M. Larrey presented a young soldier to the Section of Surgery, at the sitting of the 10th of November, through whose abdomen a bayonet had passed from side to side. The instrument entered about two inches to the left of the *linea alba*, and came out near the anterior superior spine of the ilium of the right side. A portion of intestine came out through the wound. This was reduced by the surgeon of the regiment, and the patient was sent to the hospital of Gros-Caillou, under the care of M. Larrey, who brought him round to perfect health. The patient exhibited twice, during the time the cure was going on, all the symptoms of intestinal strangulation.—*Rev. Médicale, Oct.* 1827.

—

26. Laryngitis.—M. Martinet. Hotel Dieu. In a short clinical report, published by Dr. Martinet, in a late number of the Revue Medicale, an interesting case is detailed, of which we shall give the particulars in this place.

1. *Angina Suffocans.*—The author avoids entering into the discussion, whether croup be a disease essentially different from cynanche laryngea et trachealis. The angina suffocans is an inflammation about the top of the air-passage, and presents some differences, according as the inflammation is seated in one or other part of the larynx or its appendages. The alteration of the voice, the sound of the cough, the distressing paroxysms of suffocation, the kind of expectoration, (when there is expectoration) suffice to characterise *cynanche, laryngea cyn. trachealis;* while, on the other hand, the tumefaction and redness of the velum palati, tonsils, and pharynx, together with the presence of crusts or exudations of different sizes, on these parts—the difficulty, or even impossibility, of swallowing—the regurgitation of liquids through the nose, these will readily mark the existence of cynanche pharyngea and tonsillaris. Œdema of the glottis may be suspected, when there is a sensation as if a foreign body were placed in the throat, and more especially when, by the finger, a kind of ring or ridge is felt surrounding the rima glottidis—attended with extreme dyspnœa. But often there is a complication of all these affections in the same subject.

In some instances, the angina suffocans does not show unequivocal characters of *inflammation*, and then our practice is necessarily embarrassed—some trusting to depletion, some to calomel, and others to emetics and counter-irritation. In this

state of vacillation as to the best method of treatment, the patient often dies by the rapidity of the disease, and the derangement which some of the most vital functions in the body experience. The following case will show the path which we ought to pursue, where the subject is young and vigorous. It will also demonstrate the power of art over one disease at least.

Case. Peter Chapion, 26 years of age, of vigorous and sanguineous constitution, came into the Hotel Dieu on the 11th March, being that day seized with acute pain in the throat, about the top of the larynx, quickly followed by difficulty of breathing, and sense of suffocation. Eight ounces of blood were taken from the arm, but the sense of suffocation continued, and made progress, without increase of frequency in the pulse, or elevation of heat on the surface. *Thirty leeches* were applied round the neck, and, the same evening, venesection was repeated to *twenty ounces*. The dyspnœa was relieved by this last bleeding, and the sense of suffocation rendered less imminent. *Mustard pediluvia.* 12*th*. The pain at the top of the throat is still acute—the voice is altered from its natural tenor, being much weaker—respiration difficult and sonorous, but not accompanied with much sense of suffocation—tumefaction of the tonsils and uvula—no appearance of albuminous exudation on any part of the fauces—the deglutition is difficult—pain on pressure of the larynx. Some of the physicians, on introducing the finger, thought they felt a swelling about the rima glottidis. There was an expuition of reddish and sanguinolent saliva—pulse easily compressible and very little increased in frequency—heat moderate—countenance indicative of anxiety—great prostration of strength, face neither pale nor flushed, but the circulation apparently impeded—inability to deviate from the upright posture. *Venesection—blister to the nucha—purgatives—sinapisms to the lower extremities.* This day passed, like the preceding, in a state of constant dyspnœa, with occasional paroxysms of sense of suffocation, not, however, so threatening as to require tracheotomy. *Sixty leeches were applied round the neck*, and a cataplasm over the bites. 13*th*. The sense of suffocation is diminished, and the patient can fill the chest by a deep inspiration—expectoration very difficult, but changing in character to the muco-purulent form. *Twenty more leeches to the neck.* On examination with the stethoscope, the breathing was heard much more distinctly in one side of the chest than in the other, and the *râle muqueux* indicated inflammatory action of the mucous membrane of the bronchia. From this time, the expectoration became freer, and the dyspnœa less, until convalescence was established.

Remarks. The above is a good sample of that dangerous disease laryngitis. The depletion, except in the first instance, was bold and decided; but the Hotel Dieu physicians deprived themselves of a powerful means of checking inflammatory action, by withholding nauseating doses of antimony and calomel, which increase the intestinal secretions, and save a great deal of sanguineous depletion.—*Johnson's Journal.*

—

27. Gangrene of the Lungs.—This is a rare disease, and has never been accurately described before Laennec's time. Since the work of this talented physician appeared, M. Andral, M. Bouillaud, and others, have brought forward examples of the disease in question. The following case is deserving of record, though we shall greatly abridge the original.

Case. A gendarme, 38 years of age, received, on the 10th March, a violent blow of the fist on the right side of the chest, which was followed by severe pain for some days, but not such as to prevent him from pursuing his usual avocations. Towards the end of March, he began to lose his appetite, and decline in health. On the 16th April, he was forced to give up work, and consulted Dr. Pichot, who found the skin dry and hot, pulse quick and hard, tongue red at the point and edges, epigastrium tender on pressure, nausea, sometimes sickness after food, bowels irregular. The patient did not now complain of the side that had been injured; but only observed that he felt some uneasiness there one or two hours after eating. Considering the disease as inflammation of the mucous membrane of the stomach and bowels, Dr. P. ordered leeches to the epigastrium, and mucilaginous and farinaceous drinks. The patient was speedily relieved, and in ten days he was able to take food without inconvenience. Returning, however, to irregularity and intemperance, he fell back,

in three weeks, to the same condition as before. The original treatment was again prescribed, and in three or four weeks he again recovered. Once more he got into his usual habits of intemperance, and again he relapsed. He now entered the Charenton Hospital, whence he was discharged uncured. He next tried the VAL DE GRACE, and had no better success. He returned home, and consulted a Parisian physician, who promised to set him up in a fortnight. Emetics and drastic purgatives were now energetically administered, and the patient daily got worse! On the 15th September, Dr. P. was again consulted, and found the poor man in a desperate condition, being emaciated to a skeleton, and harrassed with constant expuition from the mouth, without cough, or difficulty of breathing. The patient complained of burning pain between the shoulders and in the right side of the chest—pulse soft and regular—urine high-coloured—sleep greatly interrupted—abdomen swelled and painful in several places. Our author suspected chronic gastro-enteritis, converted into acute or sub-acute; but did not suppose there was any very material disease of the lungs. He prescribed some soothing medicine, and, for a few days, the patient seemed a little better. At the end of a week, he was suddenly seized with a sense of suffocation, extreme pain in his back and through the chest, violent cough, attended with fetid expectoration. These symptoms were sometimes exasperated—sometimes moderated; and in this condition the miserable patient dragged out a wretched existence for fifteen days, when he expired.

Dissection. In the right side of the thorax, there was found a vast depôt of purulent matter, enclosed in a kind of cyst, formed by false membranes organized. The greater part of the lung of that side was in a state of complete gangrene, being black, putrid, soft, and exhaling a most fetid odour. The left lung was the seat of a considerable degree of inflammation, as was the internal surface of the pericardium, which was covered with a soft false membrane. The heart itself was sound. The liver was greatly enlarged, and somewhat indurated. The stomach and intestines were opened throughout their whole extent, and various marks of chronic inflammation were evident on their internal surface.—*Bibliotheque Medicale.*

—

28. SINGULAR INSTANCE OF DOUBTFUL SEX.--The being respecting whom this doubt exists is at present in Guy's Hospital. He, or she, is about five feet four inches in height; has the dress and habiliments of a female; is twenty years of age, and has been brought up as a woman. The features are feminine, and there is a softness of expression in the countenance that proclaims the woman; indeed this person would pass in the world under the ordinary and very comprehensive phrase of a "good-looking" girl.

The neck and chest are those of a female; there are no mammæ, but the nipples are large, and surrounded with a dark areola of considerable extent. Passing downwards to the abdomen, we have here one characteristic of the male, namely, that the hair passes in a straight line from the pubes nearly to the navel. It is in the genitals, however, that the most extraordinary circumstances are to be observed.

First, we observe that there is a very large portion of hair growing about these parts; we see the external labia of a woman, very much enlarged, and upon feeling them we find in each an oblong body of about the size of a chestnut; firm to the feel, and particularly distinct and moveable on the right side. Protruding through the upper part of the labia is a body of the thickness of a moderate-sized finger, and of about an inch and half to two inches in length, exactly resembling the male penis in appearance, but that it has no orifice. There is a glans, with a prepuce, that may be drawn over it; it is, however, in the natural situation of the clitoris, and it has no corpus spongiosum. Beneath this penis, or clitoris, or whatever it may be considered, we find the meatus urinarius of the female; we see also the rudiments of the nymphæ, or internal labia—merely, plicæ.

The vagina is only of about three-quarters of an inch in length, and terminates in a *cul de sac.*

The pelvis is expanded, and we consider it to resemble that of a female; the thighs are brawny, and so far masculine; but the knees incline inwards, as in the well-formed woman.

With respect to the passions of the being, they may truly be said to be negative;

it does not feel an amorous inclination towards either sex, but remarked, when closely questioned, that "*of the two!*" a man would be preferred. The understanding seems to be of an ordinary stamp; the head is tolerably well proportioned. There seems to be a lack of that noblest attribute of woman—modesty; there is no hesitation at showing the parts from shame, except that now the frequent applications have become tiresome and fatiguing.

The object of this individual in coming to the hospital, it is supposed, was with a view of obtaining some relief to the malformation. *He*, *she*, or *it*, however, stated, that the general health was suffering, and attributed it to the want of the menstrual discharge, which we scarcely need say has never appeared. There is said to be some indications of this at certain periods, but this does not appear to be clearly ascertained.

There has been a great number of visitors to this case; amongst others, Dr. Blundell, Sir Astley Cooper, Dr. Babington, and Mr. Travers. We believe that it is the opinion of Dr. Blundell, after a most attentive and rigorous investigation, that *there is no womb*. It has been questioned whether the bodies within the labia are ovaries or testes, some who maintain the latter opinion assert, that they can distinctly feel the chords; there certainly is some chord-like attachment, but we cannot aver that it is the spermatic chord of the male.—*Lancet*.

—

29. *On the* Cause of Death *after the ligature of the eighth pair of nerves* (*Zeitschrift für Physiologie. Erstes Heft*, 1826.)—Professor Mayer of Bonn has invesitgated this interesting subject experimentally; and he infers that, in almost every instance, unless some of the accidents presently to be mentioned intervene, death is owing to the blood in the heart and lungs losing its power of continuing fluid. If the animal, says he, dies soon after the nerves have been tied or divided, the cavities of the heart, and the arteries and veins of the lungs are found after death filled with a soft coagulum of black blood. But when death does not ensue for forty-eight hours or upwards, then the clots are firm, white, fibrinous, free from colouring matter, and they pervade the pulmonary vessels to their minute ramifications. These concretions, he thinks, are formed during life, and are the cause of death; and they are owing to the blood, in consequence of being withdrawn from the operation of the nervous influence, tending to separate into its proximate principles as it does after death. The value of the author's experiments is very much depreciated in our eyes by his not having stated the period after death within which these polypoid concretions were met with. It is well known that similar concretions are often found in the human subject, and though some pathologists believe they occur during life, nay are even sometimes the immediate cause of death, the more general doctrine is that they are a pseudo-morbid appearance altogether, and do not occur till after death. In order to prove that the concretions observed by Professor Mayer are not, as the phenomena now mentioned are generally conceived to be, the product of operations after death, he ought to have examined the bodies of the animals on which he experimented immediately after death, or rather when death was approaching. If fibrinous concretions are found in such circumstances it is unnecessary to point out the light which the observation will throw on many analogous pathological phenomena. In making experiments for ascertaining this point, it is important to attend to the accidental causes of death which have been pointed out by the physiologist of Bonn. They are in the first place the passage of the food into the trachea, in consequence of the paralysis of the constrictor muscle of the cardia, and the muscles of the glottis; and secondly, a more rare accident, emphysema of the lungs and thoracic cellular tissue, probably caused by rupture of the bronchial mucuous membrane during the violent efforts sometimes made to inspire.

Professor Mayer has farther made some valuable observations on other more subordinate effects which result from ligature or division of the eighth nerves. He agrees with the late experiments of Breschet, Vavasseur, and Edwards, who observed that, contrary to the statements of Wilson Philip, digestion is not essentially impaired. He found that the animal temperature was not diminished by the operation, or at least not nearly in proportion to the diminution of the breathing. But

the most remarkable phenomena he has mentioned, is the invariable and extraordinary discrepancy in the effects of the operation on the breathing and on the action of the heart; while the respirations are diminished in number to a half, a third, or even only a sixth of their natural frequency, the pulsations of the heart are doubled or quadrupled in frequency. The cause of this discrepance he thinks is, that the obstruction caused by the concretions in the pulmonary vessels necessitates an increased and more frequent action of the heart, in order that a sufficient quantity of blood may be transmitted through them.

—

31. Method *of recognising the stains caused by blood on steel instruments.*—[*Journal des Progres des Sciences*, T. iv. 1827.] Professor Orfila has recently made some experiments on this subject with the view of illustrating certain questions in Medical Jurisprudence,—in which namely doubts are entertained whether stains on steel instruments are caused by blood, by acid juices, or by rust; and the following are the criterions which he proposes. 1. When the instrument is heated to 80 or 90° F. the stain becomes brighter if it is caused by blood, but is not altered if it is caused by rust or lemon juice. 2. A drop of hydrochloric does not alter a blood-stain, but dissolves rust or acid stains. 3. The blood-stain steeped in water parts with its colouring matter to that fluid, and the red colour is retained on filtration, while stains caused by rusting or by vegetable acids either do not tinge water at all, or, if they cause a reddish-brown muddiness, it is removed by filtration. 4. The colouring matter derived from the blood stain may likewise be recognized unequivocally by its chemical properties, and in particular by the effect of chlorine: A minute quantity of chlorine turns it green, a larger quantity decolorizes it altogether, and an infusion of galls added to the decolorized solution causes a dark-red precipitate, which is the colouring matter in union probably with tannin. 5. Strong nitric acid destroys the colour of the stain caused by blood; the diluted acid dissolves it, forming a red solution, which precipites red with infusion of galls.

—

31. Case of Hydatids of the Uterus.—A woman, after being six times pregnant, imagined herself with child for the seventh time, in consequence of the cessation of the catamenia. Soon afterwards she was attacked with incessant vomiting, the abdomen increased rapidly in size, and became tender to the touch, the legs became œdematous and the breathing short. These symptoms, however, she conceived to arise from twins, and she did not apply for medical assistance. In the fifth month of the supposed pregnancy the swelling of the belly became rapidly enormous, the œdema extended over the trunk, and her respiration became very difficult, when at length labour-pains suddenly set in, and considerable hemorrhage ensued, which was at first checked by cold applications, but soon afterwards returned more violently. At the same time a large mass of hydatids as big as two fists was discharged. The accoucheur, who now saw saw her for the first time found her pale, fainting, without pulsation at the wrist, and breathing slowly and laboriously. The fundus uteri was a hand's breadth above the navel, and the tumour formed by the womb was regular, not elongaed or lying to one side as is usually the case in this disease. The os uteri was dilated to the size of a half dollar, and was very tender to the touch. Masses of hydatids projected from it into the vagina; and there was constant hemorrhage. The treatment adopted in these circumstances consisted in the administration of tincture of castor every fifteen minutes, spirituous frictions of the abdomen, and the injection into the uterus of a solution of salt acidulated with vinegar. In consequence the labour-pains, which had almost ceased, were speedily renewed and rapidly increased in strength, masses of hydatids were at the same time discharged, and ere long the hemorrhage abated considerably. In the course of two hours the fundus uteri had descended to within a hand's breadth above the pubis; in the course of the day it had descended still lower; the hemorrhage ceased; a warm perspiration broke out, accompanied with rising of the pulse, and the patient soon recovered. Milk appeared in the breasts on the third day, but receded again without any bad consequence. The hydatids weighed six pounds. They were attached to the remains of a *membrana decidua*.—*Rust's Magazine für die gesammte Heilkunde.*

32. NEW TEST OF THE SOUNDNESS OF THE LUNGS.—We select, entire, the following letter to one of the Editors of the Edinburgh Journal, by Dr. Lyons, Staff-Surgeon, Edinburg, inasmuch as it describes a novel mode of exploration of the chest, and one which will require the touchstone of experience to convince us of its utility.

"DEAR SIR,—The plan which I principally confide in for the purpose of ascertaining the integrity of the lungs of recruits, since the commencement of this year, continues to answer my most sanguine expectations; and as it appears to meet your approbation, as well as that of many of my Edinbugh medical friends, I beg that you will obtain for it a place in the Medical Journal, in order that it may become more extensively known.

"Most officers placed in a situation similar to myself will speedily recognise in it a much more applicable assistant in difficult chest cases than the stethoscope; for by the simple process in which this plan consists they can ascertain at once whether the respiratory organ labours under any diminution of its capacity by the formation of vomicæ, or from the deposition or infiltration of tubercular matter, coagulable lymph, hepatization, or matter between the pleura costalis and pulmonalis; it likewise detects any morbid irritability of the bronchial tubes which gives rise to dyspnœa. When the deaths from phthisis among the troops, and the numerous cases of young and well-looking phthisical subjects, who daily present themselves for admission into the service are considered, and the difficulties which the most experienced medical officers often meet with in ascertaining precisely the state of their lungs, it must be allowed that any plan which would obviate the difficulty would prove highly useful to the military and naval service. Most of my professional friends to whom I have mentioned the plan are of opinion, that, in exploring the chest in the incipient states of tubercular phthisis, and in pleuritis with effusion, it cannot fail to prove of great utility to medical men. In the latter of these diseases it readily detects the progress of absorption of the fluid, and is not liable to the objections which are raised against the stethoscope, on the grounds of delicacy, or exposure to the surrounding atmosphere. In many instances the diagnoses formed from this plan were corroborated by the stethoscope, percussion, or immediate auscultation, as well as by the confession of the individuals, after their hopes of their entering the service was destroyed. The patient, after being examined for external causes of disqualification, is desired to inspire fully, and during the following expiration to count as far as he can slowly and audibly, without allowing himself to take another inspiration. The number of seconds he is enabled to continue counting in the expiration is noted by a watch with a second hand: this time will be found to increase in proportion to the integrity of the lungs. In confirmed phthisis the time of counting never exceeds eight, frequently falls under six or seven seconds; in pleuritis and pneumonia it seldom lasts for more than nine, and frequently falls as low as six and four; in hepatization it ranges in proportion to the extent of disease from eight to fourteen. In a young man, strong-looking and healthy, discovered to have dyspnœa, with a slight tinge of lip and ear, and also in an asthmatic patient during the absence of the fit, although a healthy-looking young man, it did not exceed ten. In a perfect inspiration, with apparently sound lungs, the individual counts from twenty-five to thirty seconds during the expiration. After the most perfect inspiration the time of counting during the expiration does not exceed thirty-five seconds.

A very few trials will enable the most inexperienced persons to apply this plan, and to make the necessary allowances in particular cases.—I am, my Dear Sir, truly yours, WILLIAM LYONS.

33. Perforation of the Intestinum Ileum.—[*M. Martinet. Hôtel Dieu.*] It was reserved for modern pathology to discover the true cause and the terrible consequences of this fatal accident. A knowledge of the *causes* of a disease, is the first and most certain step towards prevention. In former times, when dissections were less common, many sudden and violent deaths were caused by perforations of the stomach and bowels, which were not suspected—and when these perforations were discovered, their cause was not ascertained. This cause is preceding inflammation and ulceration of the mucous membrane in general—sometimes, though very rarely, of the peritoneal coat first, and the other coats afterwards. When we reflect on the frequency of these intestinal *ulcerations*, we might wonder that *perforations* are so rare; but we must remember, that the peritoneal covering of the intestinal canal presents a most powerful and obstinate barrier to the escape of fæcal matters, even when the mucous and muscular coats are completely destroyed. Nevertheless the perforation does sometimes occur, and that at all periods of muco-enteritis—and even during convalescence from that disease, and from fevers, when patients are thought to be out of danger, and when practitioners are off their guard. Excesses of the table, at this period, bring the danger into view when it is too late. On this account, the convalescence of a patient from any disease in which inflammation of the internal surface of the intestinal canal had previously existed, should be most rigidly watched, and all imprudences in food forbidden.

When this rupture of the external tunic takes place, there is, in general, a pain, more or less acute, felt in some particular point of the abdomen, commonly about the umbilicus, or towards the caput coli. The pain is suddenly developed, and sometimes consists, at the very beginning, of a sense of burning heat, spreading in all directions from a centre. The pain, however, rapidly augments, and soon occupies the whole of the abdomen, rendering the least pressure insupportable. Then come on nausea, vomitings, hiccup, profound alteration of the features, extreme smallness and quickness of the pulse; all showing the existence of acute peritonitis. Two, three, or four days of intense suffering bring the solace of death.

The diagnosis of this terrible calamity is rendered very difficult, when the patient happens, at the time, to labour under cerebral disease, especially arachnitis; for then, the delirium which obtains prevents the patient from feeling, or at least expressing, the abdominal sufferings. In a few instances, the inflammation resulting from perforation and extravasation has been sub-acute, and patients have lived ten or twelve days. This, however, is rare. If the pain continues confined to a circumscribed spot, we may hope that the intestine has been ruptured into a kind of cyst, of which there are several examples on record. We shall now introduce the particulars of a case in illustration.

Case. Brisson, aged 25, had fever and diarrhœa for three days prior to his entrance into the Hôtel Dieu, when he complained of abdominal pains, head-ache, and febrile attacks, every evening. *Second day.* The belly was rather painful on pressure, especially about the navel—diarrhœa—cephalalgia—tongue very white—pulse strong and full. *Injection containining tartar emetic and sulphas magnesiæ*, which provoked some vomiting, with relief of the cephalalgia and abdominal pain. During the next few days, he was kept on farinaceous food, and he was on the point of full convalescence, when, on the eleventh after his entrance, he was suddenly seized with severe pain above the pubes, which quickly spread over the abdomen, attended with dysury, vomitings, bloody diarrhœa, &c. *Leeches, warm-bath:*—but no relief followed. He lingered out for three days after this, and then died.

Dissection. The cavity of the pelvis was filled with flocculent pus and a milky fluid —intestines covered with false membranes, of very recent formation—a small perforation, perfectly circular, in the ileum, a few inches from the ileo-cœcal valve—the mucous membrane around the perforation was red, but not thickened, or otherwise altered—no other ulceration in the ileum; but there were two or three small ulcers in the large intestine, with inflammation of some of the mucous follicles.—*Johnson's Journal for January*, 1828.

—

34. New Method *of treating Syphilis By Dr. C. H. Dzondi, Professor in the University of Halle.*—Professor Dzondi, from an experince of ten years, comes to the

conclusion that the best method of treating syphilis, is not by small doses of mercury gradually introduced into the system, but by large doses quickly administered. The fundamental principles of this new method are these:—1mo. That mercury is a dangerous poison, the effects of which are much more difficult of cure than the inveterate syphilis. 2ndo. That mercury is indispensable in the cure of the disease, in all cold countries; and is only poisonous when exhibited in a certain manner. 3tio. That the present mode of administering the remedy is, in general, inadequate to the complete radication of the disease, except in cases where the virus is mild. In cases where it is otherwise, it either aggravates the malady, palliates the outward symptoms, or masks the disease from view. 4to. That the oxymuriate of mercury, properly prepared, is the best form of the remedy. Professor D. begins with about half a grain of the sublimate for a dose, (per diem,) and increases it to two or three grains daly. He is convinced that a large quantity may be taken in small doses, without ultimate cure; while a small quantity given in large doses will be speedly effectual. He gives the medicine immediately after taking food, and never on an empty stomach; sometimes combining opium with it, when pain is complained of in the stomach or bowels. He does not consider it necessary to make any change in the *kind* of food which the patient takes during the course. Salivation rarely takes place under this mode of treatment. The duration of the course is generally four weeks, during which, the action of the skin is to be promoted by warm air, warm clothing, and confinement to the bed-room in cold weather. In Summer, and in very fine weather, the patient may be permitted to go out for an hour or two in the middle of the day in order to quicken the action of the absorbents, and thus to diffuse the remedy as rapidly and as extensively through the system as possible, the patient is to take no more food than is absolutely necessary for the support of life. He does not particularly object to alcoholic, or other stimulating drink, in moderation. Sarsaparilla he considers the best auxiliary to the mercury; but by no means adequate to the cure of the disease by itself, especially in northern climes.

The above practice appears to be a modification of that which has been tried and recommended by some surgeons in this country*—we mean Mr. John Cunningham and Mr. James Boyle, surgeons in the Royal Navy. They gave calomel in 20 grain doses twice or thrice a day, so as rapidly to affect the system, when the syphilitic symptoms were found quickly to give way. We leave it to our surgical brethren to think on these proposals, based as they are on experience. The high character of Professor Dzondi guarantees the authenticity and veracity of any thing proceeding from his pen.—*Ibid.*

—

35. Fatal Exhalation *of Blood into the Stomach.*—(*M. Adouard.*)--Pathological anatomy has clearly proved that great effusions of blood may take place into the substance of the brain and the lungs—or into the cavities of the viscera, as well as of the thorax and abdomen, by a kind of exhalation leaving no trace of ruptured vessel. The following is a remarkable example.

A soldier, of lofty stature, and sanguineous temperament, in the prime of life, became affected with tertian fever at Rome, during the French occupation, and was in the Military Hospital for cure. One day, when it was the period for the return of a paroxysm, he was seized with a strange sense of general malaise, and called out for the nurse. In a few minutes he fainted; and, on reviving from this, he threw up some blood from his stomach, and expired. On dissection, the stomach was found distended by an enormous clot of blood; but the most careful examination could not detect the source of the hæmorrhage. Some of the sudden deaths which we hear of, and which are not investigated by dissection, are caused in this way. Was the above congestion in the vessel of the stomach a fatal substitute for the ague paroxysm that ought to have occurred?—*Ibid.*

—

36. Enlargement of the upper lip.—In a recent Number of the Journal de Progres, Dr. Paillard has drawn the attention of his brethren to the treatment of this peculiar deformity. He observes that this said enlargement is generally considered as an effect, as well as a sign of scrofula. It usually appears in scrofu-

* And also by Dr. Cartwright in this country. Eds. Recorder.

lous subjects, and in that period of life when scrofula prevails—and it generally disappears when the scrofulous diathesis ceases, or is overcome. But we occasionally observe this phenomenon where there is no scrofula in the constitution, and it sometimes remains as a striking deformity, after the other symptoms of scrofula have entirely vanished.

If, in a scrofulous subject, we examine this swelling of the upper lip, we find the cellular tissue more abundant than natural, and infiltrated with a serous fluid —the muscles more pale and flabby than in a healthy subject—the skin very pallid or shining, and, as it were, infiltrated. Sometimes this swelling is covered with ulcerations, which discharge a matter that form into scabs, which fall off, and are renewed from time to time. The cellular tissue, then, appears to be the seat of this affection. But the treatment differs, according as the complaint is an indication of scrofula, or independent of that diathesis. In the *former* case, local treatment is of no avail, and we must cure the local complaint through the medium of the constitution. In the *latter* case, the local treatment now to be mentioned is efficacious. This operation consists in an incision from one angle of the mouth to the other, along the inner side of the upper lip, and thus, in fact, dissecting away a mass or condensed cellular tissue forming the swelling. The hæmorrhage is very great; but it either ceases spontaneously, or may be restrained by ligature of the bleeding vessels. The operation is very painful, but not dangerous; and it removes a deformity which gives a peculiarly stupid cast of countenance to the individual afflicted with it. For the cases detailed in illustration of the above proceeding, we must refer to the Journal already quoted, vol. 3, 1827. —*Ibid.*

—

37. Notes of a Case *in which the Canal of the Larynx after being nearly obliterated, was re-established.*—Elizabeth Oswald, æt 27, in attempting suicide in September 1826, had wounded the larynx through the crico-thyroid ligament.

She was under treatment for some months, and was at length abandoned with the loss of voice, and breathing entirely through a silver tube introduced in the situation of the original wound. On withdrawing this tube, and examining the parts attentively, a very minute orifice, capable of admitting the point of a probe of half the usual size, was discerned leading towards the glottis.

About April 15, 1827, Mr Liston saw her by the request of Mr Sidey, who had attended much to the case from the first, and began to introduce bougies about the size of darning needles into the part of the trachea above the wound; and by gradually increasing the size of the bougies the passage was brought about the end of June to its natural diameter. About the middle of August the lower part of the trachea was dilated by a tube gradually increased in size, so that one of sufficient diameter might be passed by the mouth.

Three weeks afterwards the short tube was removed, and a long one was introduced by the wound up into the mouth, there laid hold of and pushed down into the trachea. This was followed by a very severe fit of coughing, which lasted about half an hour.

This tube, which was about nine inches long, and equal in diameter to that of the largest œsophagus tubes, was retained in the windpipe for fifteen days, during which it caused great salivation which loosened the teeth and extremely reduced the strength of the patient. In consequence of this it was necessary to use some active means for the closure of the wound. On the fifth day the cicatrix was dissected out by two elliptical incisions, and the edges of the wound united by suture. The tube being removed on the fifteenth day, (October 5th,) she breathed well. In the morning, however, her breathing became very difficult, and *tracheotomy* was performed, and a silver tube introduced, which was kept in five days, and then replaced by a smaller one.

The actual cautery was applied to the edges of a small sinus, which remained on October 17th; and on the 26th it was reapplied to the opening, which had very nearly closed. On the 28th the tube was removed; and a few days after the wound was completely closed. The woman now breathes with comparitive ease through the larynx, and is slowly recovering the use of her voice.—*Edinburg Medical and Surgical Journal.*

38. *Death by Submersion.*—The following is the substance of another treatise, of great medico-legal interest, which was read by M. Orfila at a subsequent meeting of the Acadamie Royale de Medecine. The object of the author is to ascertain what are the signs peculiar to death occasioned by submersion; a question on which writers have hitherto been much divided. 1. The livid, suffused, and bloated appearance of the face, with frothy slaver in the mouth and nostrils, which some have considered to be sure signs of death by drowning, are rejected as such by M. Orfila, because they are often wanting in drowned bodies, and occur frequently in other kinds of death. 2. Thus, too, the great paleness of skin is more an effect of prolonged immersion than of the kind of death. 3. Excoriation of the fingers, and traces of mud or dirt under the nails, prove but little: they are not found in those who have died before they touched the bottom of the pool or river; and again, they are found on corpses which, before falling into the water, shall have come in contact with any harsh or dirty substance. Besides, after long immersion, putrefaction of the parts has proceeded so far as to confound all marks of excoriation, as well as those of mud and dirt; the epidermis and the nails peel off. 4. The injected state of the meninges is a fallacious sign: all drowned bodies have it not, while other corpses have. Nevertheless, we should not overlook this appearance, if it were proved that the corpse grew cold in the vertical position. 5. In most of the drowned, the right cavities of the heart, the veins, and pulmonary arteries, are distended with black blood; the arterial system, on the contrary, if not altogether empty, as Curry affirms, is at least much less full. The right ventricle, too, is of a blackish brown, the left of a clear rose colour; and the right cavities retain a contractility far exceeding that of the left side. But, not to mention that these phenomena are observed in many other kinds of death, we may see the parietes of the heart readily change colour and become brown by contact with the blood; and, in order to witness the greatest degree of irritability in the right cavities of the heart, we should open bodies *soon* after submersion. 6. The blood is found fluid in almost all the drowned; though an unaccountable exception obtains in dogs so deprived of life: yet this fluidity occurs in several other kinds of death; and even in cases of drowning, Lafosse long ago, M. Avisard recently in two instances, and M. Orfila himself in another, found the blood coagulated 7. It has been said that the drowned die in the act of inspiration, and therefore have the diaphragm depressed, and the ribs elevated: common reflection alone might have refuted this assertion, if M. Orfila had not positively contradicted it, after the examination of above fifty drowned bodies. 8. By the experiments of M M. Edwards, Jenner Cox, Piorry, and Orfila, the early influx of water into the stomach during submersion, and its entire absence in cases of death preceding submersion, is now well established. So that, if the stomach contain water, which is identified with that out of which the corpse was taken, a probability results that submersion was the cause of death. At the same time, it should be ascertained that this water was neither swallowed before death, nor injected into the stomach afterwards. 9. As to the state of the respiratory tubes, the remark of M. Detharding, that after drowning, the larynx is found closed by the epiglottis, is not true; and the appearance of froth in the trachea affords very uncertain evidence, being neither universally present nor permanent.

The only absolute proof of submersion having been the cause of death will be the presence of water in the extreme ramifications of the bronchia—but with these reservations, that the contained water is the same as that in which submersion took place, that it has not been injected after death, and that it could not have entered in consequence of the vertical position of the corpse. Owing, however, to the attempts at inspiration, water penetrates farther into the lungs before death than it can afterwards.

Unfortunately, it is difficult to detect water in the pulmonic issue, unless it be coloured, or turbid with mud, which is so rare a case, that M. Orfila has only met with it in one out of the many bodies of the drowned that he has examined. And here we are warned against mistaking for sand or gravel the particles of food, which, rising from the stomach into the fauces, may have subsequently passed into the trachea. This phenomenon has frequently been observed in the drowned, even where no putrefaction had yet commenced. M. Orfila then adds, that the absence of water in the bronchia, and of froth in the trachea, is accounted for in various ways; so that nothing is thereby proved against fatal submersion. In conclusion, he adverts to a

remark of M. Piorry, that while in all sudden deaths the bladder is empty, it is found full in dogs that have been drowned. M. Orfila attributes this fact to absorption of water which has penetrated the bronchial ramifications; but he is not disposed to receive it in evidence—for, according to the experiments of M. Piorry, this fulness of the bladder disappears as the body becomes rigid; and rigidity comes on soon after drowning, in consequence of the rapid refrigeration of the body by the cold water.

At the suggestion of M. Itard, the meeting ordered the work of M. Orfila to be published.—(*Revue Médicale, Août*, 1827.)

—

39. Operation for Empyema repeated.—In Horn's Archives, for March, 1826, there is related the case of a man, who twice underwent paracentesis thoracis, with an interval of 22 years between the operations.

Case. A man, of middle age, was seized with symptoms of violent inflammation in the left side of the chest, for which he was copiously bled, and had proper medicines administered. When questioned by Dr. Guerard, he informed the physician that, 22 years previously, he had been affected with pneumonia, which terminated in an abscess, and for which an operation was performed. As the inflammation still continued, Dr. G. ordered farther depletion, blisters, &c. On the 5th day, there was oppression on the chest, and the stethoscope gave indications of a fluid in the left cavity of the pleura. On the 9th day, the symptoms were so unequivocal, that the operation was performed, when a large quantity of fetid pus was evacuated, with relief of all the symptoms. The discharge gradually decreased, and, on the 5th day from the operation, the patient was able to leave his bed. He was seen a year after this period, in perfect health.

—

40. A Pomatum-pot found in the Vagina of a Woman, *who suffered herself to be treated for Cancer of the Womb.*—Ann G—, forty-five years old, presented herself at a consultation of the Hôtel Dieu, requesting assistance for a cancer of the womb, the existence of which was attested by a formal certificate, said to have been written by a physician of her province. The patient passed her urine through the urethra and vagina, and at the same time she suffered considerable pain in the vagina and in the hypogastrium. There was a constant discharge of a mixture of fetid urine, blood, mucus, and purulent matter. M. Dupuytren was surprised to feel, upon examination, a hard and rough body about two inches within the vagina. He at first conceived it was a urinary calculus formed in the vagina, in consequence of a vesico-vaginal fistula. The patient, however, confessed that the substance was a piece of stone, which had been placed there by force. Upon being questioned as to the circumstances of this unusual act of violence, she declared, that nine years ago she had been attacked upon the road to Dijon by two soldiers, who attempted to ravish her. For some time she defended herself stoutly. She was at length, however, overpowered: and they introduced a stone into the vagina! She stated that she had afterwards much pain in making water, and considerable fever. Her suffering, however, had gradually diminished; and, for the last eight years, she had experienced but little inconvenience. The same train of symptoms again occurred, and they were even more severe than at first. She was attacked with violent fever; and could only sleep by the assistance of opium. Other symptoms of general disturbance existed from the local irritation in the vagina. M. Dupuytren felt persuaded that the patient could only be relieved by the removal of the foreign body. She was placed in the same position as for the operation of lithotomy. Upon introducing a finger, M. D. discovered that the substance was a small pot, placed across the vagina. It was removed with some difficulty; and the woman now first confessed that she knew the pot was in the passage; that it was that which the soldiers had introduced, after having, with a due attention to economy, removed the pomatum it contained. It was covered with a saline incrustation, several lines in thickness. Emollient injections were subsequently employed, and the patient three days after the operation left the hospital. The fistulous opening between the bladder and vagina, which had been caused by the pressure of the foreign body, was completely cured. It was evident from the ridiculous and varying accounts given by the patient that she had introduced it herself. She was known to have laboured under an attack of nymphomania at about the time she stated the pot to have been forced into the vagina.—*London Med. & Phys. Journal.*

MEDICAL INTELLIGENCE.

1. *Critical Observations on Dr. Cartwright's Essay on Venous Absorption.* By James P. Espy, Esq., Philadelphia.

In a dissertation on the question, "Whether the veins perform the function of absorption," by Dr. S. A. Cartwright, in the American Medical Recorder, No. 41, a number of experiments are adduced by the author, to prove that fluids do not rise in capillary tubes by the attraction of cohesion, as is generally supposed; but by unequal atmospheric pressure. I must refer to the dissertation itself for an explanation of the author's views at large. His hypothesis is, that air will not approximate so close to solid bodies as water and other denser fluids; and, consequently, in capillary tubes the column of air does not fill up the whole area of the tubes, whilst the water does: therefore, the water in the inside of a tube will be pressed by a less weight than the water in the outside, and, of course, it will rise. I propose to show that the experiments adduced, to establish this hypothesis, fail to do so, and that one of them absolutely disproves it, while they are all in accordance with the received hypothesis of capillary attraction.

First, it may be necessary to state what I understand to be the true doctrine of capillary attraction.

If a drop of water is placed on a plate of glass or metal, and then the plate inverted, the drop will adhere to the plate, contrary to the force of gravity, and spread along the surface, and this will take place in vacuo, as well as under atmospheric pressure.

The force by which it adheres is called attraction of cohesion; this force, whatever be its cause, takes place in capillary tubes at right angles to the internal surface, and will cause a spreading of the water in the inside of a capillary tube for the same reason that it spreads on the under side of a plate; that is, the water will be attracted from the centre of the tube, perpendicular to the sides of the internal surface, and this must cause a receding from the centre, and a swelling up at the sides of the tube, and the water will rise until the weight of the column within is sufficient to balance the attraction of cohesion.

Experiment 1st. "A curved capillary tube, in which water would rise half an inch, had one of its ends immersed in a glass of water, and the other end placed in an empty vessel. When the upper part of the curvature was half an inch or more above the water, none dropped from the end of the tube in the empty vessel. But when the upper part of the curvature was depressed *less* than half an inch above the water, the tube, after a certain time, began to convey the water into the empty vessel; and so continued, until the water in both vessels was exactly on a level.

Experiment 2nd. "One leg of the above curved tube was cut off something less than half an inch from the apex of its curvature, and the longer leg immersed in water. When the extremity of the short leg was the least above the surface of the water containing the long leg, the water would not drop from the short leg: when the end of the latter was exactly on a level with the surface of the water, a drop was suspended on the extremity of the short leg, but would not fall, until the extremity of this leg was depressed *below* the surface of the water in which the other extremity was immersed."

In these experiments it is manifest, that if the water rises so far as to pass the curvature, it will continue to pass along the tube downwards, for gravitation will assist its progress, and, of course, it will reach the end of the tube where the attraction of cohesion or capillary attraction ceases: and by considering what other forces remain, we will be able to predict the remaining phenomena. These forces are atmospheric pressure and gravita-

tion; but atmospheric pressure is equal at both ends of the tube; so far as that is concerned there will be equilibrium; but if the outer end of the tube be below the surface of the water in the vessel, it will run out by its superior weight; if it terminates above the surface of water in the vessel, it will remain suspended by the superior weight of the inner column; that is, from the nature of atmospheric pressure, it cannot run down without pulling after it the inner column, which, from its inferior weight, it cannot do.

Experiment 3d. "One end of a curved capillary tube was passed through a stopper, and inserted into a vial filled with water; the stopper was so secured in the mouth of the vial as to exclude atmospheric pressure. No water would drop from the tube; although the distance from the surface of the water in the vial to the upper part of the curvature of the tube was much less, than the height to which the water would rise in the tube, when immersed in the vial before it was stopped. As soon as the atmospheric pressure was admitted to the liquid in the vial, the water began to drop from the leg of the tube without the vial; and would immediately cease to drop, so soon as the vial was again stopped and filled with water. The experiment was varied. The leg of the tube, without the vial, was plugged, while the water was dropping from it. The vial was filled and stopped as before. Both the tube and the vial were now full. The plug was cautiously taken out of the tube, but no water would drop from it. When the stopper of the vial was removed, the water began immediately to drop from the tube. The vial and tube were again filled as before, and set under the receiver of an air-pump. On working the air-pump, the extremity of the tube, without the vial, became emptied of water, but the tube would not continue to drop until the atmospheric air was admitted into the vial."

The first part of this experiment proves that atmospheric pressure, which is equal to a column of water 33 feet high, is more than a balance for capillary attraction; for, if you suppose water to begin to rise in the tube, either a vacuum or a rarefaction in the bottle would take place, and the pressure of the air on the outside of the bottle, containing the same, the water in the tube cannot rise, unless capillary attraction is stronger than atmospheric pressure, which is not the case in any tube in which water would not rise, by this attraction, 33 feet. When the stopper was withdrawn, the experiment did not vary from others. In that part of experiment 3d, connected with the air-pump, the author is not very explicit whether the end of the tube was above or below the surface of the water in the bottle; if above, no doubt, the exterior leg would be emptied by the elasticity of the air within, as soon as the pressure was diminished without; but, if the end of the inner leg was below the surface of the water, then, when the exhaustion commenced, a very small quantity of air in the neck of the bottle, or even the portion of air which would be liberated from the water itself, by removing the atmospheric pressure, would, by its elasticity, be sufficient to force the water up the capillary tube, and make it run out; but in this case the tube would remain full, until air were readmitted into the receiver, and force back the water, which might take place by the leakage of the pump—let the author perform this experiment again, and see if much more water does not run out of the outer leg during a rapid exhaustion than was originally contained in it, and then let him admit the air suddenly, and see if the water is not forced back, and made to leave the tube empty in this way, and not, as the experimenter supposes, by dropping out. If the experiment should turn out as stated here, it does not prove that none of the powers to which capillary attraction has heretofore been attributed will produce that phenomenon when atmospheric pressure is entirely excluded.

Experiment 4th. "A straight capillary tube was passed through a stopper, and one end inserted into a vial filled with water. The vial was stopped so as to exclude the pressure of the atmosphere. The water did not rise in

the tube above the level of the water in the vial. The heat from the hand, however, would cause the water to rise in the tube, but it would immediately sink down in the tube when the vial was immersed in cold water."

This experiment proves that capillary attraction cannot overcome atmospheric pressure, which exerts its full force on the surface of the water within the tube, while it is removed from the surface in the bottle; and that water may be expanded by heat and contracted by cold: in fact, the instrument used in the experiment was a water thermometer.

Experiment 5th. "A capillary tube, the one-tenth of an inch diameter, was fitted to a tube, an inch and a half in diameter: on immersing the wide tube in water down to its union with the small tube, and raising it up, a column of water was suspended in the wide tube of equal length of a column the small tube was capable of supporting." In this experiment, there is no doubt, the author is correct in the conclusion, that all the water is kept up in the tube widening below, by the pressure of the atmosphere, except a capillary column, perpendicularly under the capillary part of the tube, which capillary column is no heavier, and, of course, no harder to support by the upper part of the tube, which is capillary, than it would be if the tube were capillary all the way down to the level of the water in the vessel. But, as a large portion of the effect in this case depends upon atmospheric pressure, when this is removed the water must subside; not only that which is kept up by the atmospheric pressure, but also the capillary column, which can no longer be supported standing alone; if the tenacity of its parts were such as to cohere throughout its length, whilst the surrounding parts descended without cohering to it, no doubt it would remain suspended and supported by the attraction of the tube for the upper end. This conjecture, however, cannot be confirmed by direct experiment; it is, nevertheless, an indisputable inference from the whole phenomena of capillary attraction.

Experiment 6th. "A capillary tube, with the upper end hermetically sealed, was placed in a tumbler of water, and set under the receiver of an air-pump. During the process of exhausting the receiver, bubbles of air were seen to pass out of the lower end of the tube, and when the process of exhausting the receiver was suspended, the water immediately rose in the tube, far above the height to which it arose in an open tube of the same calibre." This experiment is adduced to prove that capillary tubes, placed under the receiver of an air pump, undergo a greater degree of exhaustion than the receiver itself.

This conclusion, however, appears to me a *non sequitur;* for it is manifest, that if any portion, say half the air, were exhausted from the receiver, and, of course, half of the air expelled from the tube by its own elasticity, upon the re-admittance of the air into the receiver, the water would be forced half-way up into the capillary tube, until the air in the inside became as dense as the air on the outside.

Experiment 7th. "A tube was immersed in water, and when taken out was found to suspend a column of water three-fourths of an inch in length; the upper end of the tube was sealed. Another tube was immersed in water half-way its whole length, and while in this situation was sealed. When taken out, a column of water was suspended in it, something more than half the length of the tube. Both tubes were now suspended in an empty vessel, and set under the receiver of an air-pump. After a certain degree of exhaustion, *the water dropped entirely out of the former*, but it required a much greater degree of exhaustion to exclude the water from the other. In a third tube, with both ends open, likewise suspended in the receiver, the water contained in its lower extremity would not fall."

From the deductions the author makes from the two first parts of this experiment, it would appear that he was not aware that air expands itself just in proportion as pressure is removed from it; for, as he attributes the re-

moval of the water from the tubes entirely to its weight, there is no part of this effect attributed to the expansive force of the air within. From not adverting to this principle, the experimenter has most illogically inferred, that the tube which had the greatest quantity of water, and, consequently, the least quantity of air, should have been emptied first. Now, so little of the effect depends upon the weight of the water, that if the author will perform the same experiments over again, with the open ends of the tubes upwards, the water will be expelled with the same degree of exhaustion, and with the same phenomena which he witnessed in his former experiment.

The third part of this experiment appears to me to be what lord Verulam would call the experimentum crucis, to prove that water, in capillary tubes, is not suspended by unequal atmospheric pressure; for is not this pressure removed from the bottom of the tube as well as the top? and, if there is no attraction between the glass and the water, why does not the water fall out by its own gravity? If it should be answered that there is some air left after the exhaustion is pushed as far as it will go, and the difference of the internal pressure at the top and the external pressure at the bottom of the tube, where the water comes to the very end, even of the remaining air, is sufficient to suspend the water in the tube: I answer, that even on the hypothesis of the author, that there is a difference of pressure between the internal and external of a tube, the ratio of this difference must be preserved the same in all the different rarefactions which can be made; that is, if a column of water can be suspended four inches in a capillary tube, when the whole atmospheric pressure is operating; when three-fourths of the air is exhausted from about it, the water should be suspended only one inch. Now, as water does not stand lower in an exhausted receiver in capillary tubes, it follows that its rise in these tubes does not depend, even in part, on atmospheric pressure.

Experiment 8th. "If a small quantity of water be put into a capillary tube, which is of a conical form, and laid in a horizontal situation, the water will run towards the narrower end." In this experiment, on the supposition that there is an attraction between glass and water, perpendicular to the surface of the glass, it is manifest that the forces all round the drop of water, in a conical tube, tend to draw it towards the apex of the cone. Thus it appears, there is not one experiment adduced by the author, which may not be explained by the old theory of capillary attraction; and that *one*, at least, not only cannot be explained by his hypothesis, but directly disproves it. I will only add, that even if the hypothesis of the author were granted, that air does not come into contact with the inner surface of capillary tubes, it would not account for the phenomena. For either the air presses on the water by its repulsion to the full extent of the internal diameter of the tube, or there is a space round the column of air between it and the internal surface of the tube which is *not* pressed upon by this repulsion. If the former is the fact, then the water will not rise at all in the tube from unequal atmospheric pressure; for, however fine the column of atmosphere in the centre of the tube, it will, by its repulsion, press with the whole weight of the atmosphere on the water within the tube, and, therefore, quo ad hoc, there will be equilibrium; but, if the latter is the fact, the water would rush up in the vacuum between the central column of air and the sides of the tube, with a velocity which a heavy body would acquire by falling freely 33 feet, that is, about 45 feet per second.

None can more highly appreciate the candour, talents, and professional acquirements of our valuable correspondent, Dr. Cartwright, than ourselves. We doubt not, therefore, he will view the preceding observations with that liberality which should ever characterize the man of science.

In presenting to the world a new doctrine, supported by experiments which are designed to disprove the existence of a principle in Physics, sup-

posed to be incontrovertibly established, the Dr. could not hope to have it pass unquestioned by those who have held an opposite belief.

We have, accordingly, received for publication the above communication, couched in calm and dispassionate language, which we have deemed suitable to present to our readers, in order, not only that *we* may be impartial, but that *they* may be enabled to draw correct inferences by viewing both sides of this interesting question. EDITORS.

ELATERIUM IN DROPSY.—I have employed elaterium with much satisfaction in the *atonic* stage of hydrothorax, anasarca, and phlegmasia dolens. The dose, as laid down in the books, from half a grain to two or three grains, is usually much too large, and is apt to produce a very drastic emetic and cathartic effect, so as generally to discourage the physician and the patient from a second trial. My method of using it is in a dose of an eighth or a tenth, very rarely a sixth, of a grain, made into a pill with crumb of bread or any suitable inert substance, beginning early in the morning, and repeating it every hour, till catharsis begins, or till a grain and a half or two grains are taken. If this latter quantity should have been employed without its producing catharsis, its operation is assisted with almost any moderate purgative that is liable to sit easy on the stomach. This process should be repeated every two or three days, till all the water is evacuated. Elaterium, thus managed, obviates the hydropic diathesis, debilitates but very little, and is less liable to be followed by a sudden relapse than any other course that I have ever employed.

TINCTURE OF CANTHARIDES IN GONORRHŒA, GLEET, AND DROPSY.—I have long been in the habit of employing the *strong* tincture of cantharides, (the common or weak being nearly inert,) in all these diseases. In gonorrhœa or gleet, I employ from ten to thirty minims for a dose, beginning with the smallest quantity, using an emulsion of balsam of copaiva and gum arabic as a vehicle, three, or better, four times a day. When there is much irritability, to each dose is added from five to fifteen minims of laudanum. The discharge is usually checked in twenty-four or forty-eight hours; but the medicine must be continued several days, to prevent its return. Those who employ a combination of squill, digitalis, and calomel, in dropsy, will often find from ten to thirty minims of strong tincture of cantharides, well diluted with a decoction of uva ursi, to be a very powerful adjument in promoting diuresis. It is obvious, that this course applies only to atonic dropsy. Some very *torpid* cases will admit of two or three drams of the tincture, every twenty-four hours. From a little practice, it is as manageable and innocent, as any other *efficient* article. A strangury produced by it, is very certainly checked by an enema, containing from half a dram to a dram of laudanum. MEDICUS.

CASE OF ABSCESS IN THE LUNGS, &c., communicated in a letter to the Editors, by James Frazer, M. D., of Lebanon, Tenn.

On 20th Feb., 1825, I visited Miss M. N., 31 years of age, delicate constitution, had, for several years, bad health. About two weeks before I saw her, she was attacked with acute hepatitis, accompanied with symptoms of pneumonia, much gastric distress, and high fever;—some medicines, previous to my visit, had been given, which palliated the violence of the disease. Bloodletting, I understood, was neglected. I was informed, that on the 17th, which was three days before I saw her, she had a severe chill,

succeeded by high fever: was bled to 12 oz.; took an emetic, which operated freely, both as an emetic and cathartic, greatly to her advantage. Diaphoresis, for eight hours, followed the operation. On the 20th, the time of my visit, her pulse was 110 in a minute, small and quick; tongue slightly furred, yellow, and dry: slight dry cough; could lie on the back only, with her head raised. Complained of obtuse pain in the right side, extending from the fifth true rib to the superior spinous process of the ilium; and, to use her own language, she said, "I feel as if there was a great weight on my side, pressing it down:" dryness of the surface; the liver considerably enlarged, filling the right side from the stomach to the umbilicus, anteriorly and laterally to the ilium; the pain much increased by pressure on the margin of the ribs; could not make a full inspiration; the eyes and skin tinged with bile.

She informed me, that when seven or eight years of age, she had a violent attack of pneumonia, which was improperly treated, and ever since complained of pain in the right side, bad health, and difficult menstruation. Prescribed antimonials, diaphoretics, with an occasional dose of calomel, in such a way, as to avoid ptyalism, believing that the irritation of mercurial ptyalism would be prejudicial to the pneumonic affection, as circumstances required. Used aperients of ol ricini, crystals tartar, &c. Applied a blister over the region of the liver. 27th, yellowness of the eyes and skin subsided; surface dry; obtuse pain in the side continues, but less severe; helpless, and any position, except lying on the back, produces intolerable suffering.

March 6th. A small protuberance of the integuments between the 6th and 7th true ribs, about 3½ inches from the sternum, now appeared; by careful examination, I was satisfied of an abscess in the lung, which I opened with a thumb lancet between the ribs to the depth of an inch, and a pint of ropy matter of a dull gray colour, extremely offensive, was immediately evacuated.

The discharge of the matter was very perceptibly influenced by every inspiration; the patient still lying on her back, the flow of matter began to subside. I now applied, with my hands, pressure to the liver; the matter flowed as freely as when the abscess was first opened, until three half pints more was evacuated, making, in all, one quart and a half pint: the tumid liver now appeared to be reduced in size to one half, which afforded sufficient evidence that there was an abscess in the liver communicating with the one in the lung. A firm tent was inserted in the incision made for opening the abscess. March 9th. From the time the abscess was opened until now, has had no cough. Burning of the feet and hands; face flushed in the evening: very little difference in the temperature of the surface; pulse more frequent: a pint of matter was evacuated: she now respires with much more ease. Prescribed wine and tonics. 14th, much less pain; has refreshing sleep occasionally: no appetite. 18th, considerable heat of skin: pulse 120: complained of pain at the cartilago ensiformis; applied a large blister, gave refrigerant mixture during the febrile paroxysm. 24th, apparently better; the same prescription continued. 27th, has a good appetite. April 1st, when supported, could sit up on the bed. Two days previous had a chill, succeeded by high fever. About three-fourths of an inch below the ensiform cartilage, was a livid or purple spot, about the size of a twenty-five cent piece, slightly protruded. There appeared to be matter beneath the spot, immediately under the cutis vera, which I opened, and evacuated, by pressure on the abdomen, and requiring the patient to make a full inspiration. A half pint of matter of the same colour and consistence as that contained in the large abscess was drawn off. By examination with the probe, the abscess extended backwards and downwards two inches; inserted a tent, and continued the same remedies. April 13th, very little matter now runs from the last opening, and about three large table-spoon-

fuls, in twenty-four hours, issues from the first abscess. Improving fast; has a good appetite; can walk across her room; can sit on a chair half an hour three or four times in the day. Continued wine and tonics. June 1st, had, a few days before, rode on horseback eight or nine miles. Could walk a mile without difficulty. Had not menstruated since March, but said she was in better health than she had enjoyed for two or three years. Had removed the tent from the orifice between the ribs, which is now nearly healed. The liver could not be felt below nor anterior to the ribs. June 29th, orifice healed, but complained of great heat around the place, circumscribed to about six inches; the temperature of the part considerably increased. Applied and continued poultices of slippery elm bark and solution sugar of lead in vinegar, for ten days. July 21st, visited her. Matter had formed in the cellular texture, between the skin and ribs; the matter ichorous, intermixed with small lumps, resembling curds of milk. The seventh rib exfoliating. She showed me a piece, the whole breadth of the rib, and half an inch long, that had been thrown off. On examining the sore, the intercostal artery could not be distinctly seen, it being obscured by a granulating surface, this being a week after the bone had exfoliated; but the direction of the artery could be known by its pulsation. Applied simple dressings, and directed the ulcer to be kept clean with soap lœs and lime water. She is very weak, but can sit on a chair fifteen or twenty minutes at a time, frequently. Has no appetite. Tonics continued. August 12th, exfoliation continues; several spiculæ of bone removed since my last visit. A small ulcer now appeared, two inches anterior to the first, and over the same rib, communicating under the integuments with the first or old ulcer. I divided the integuments between the ulcers, and removed the balance of the rib with its cartilage from the sternum. Tonics continued. August 24th, emaciated to a skeleton, could not sit up; great nausea, with acidity of the stomach. For two days endeavoured to relieve her with alkalies, but she grew worse. Gave an emetic of tinct. antimon.; operated well. Prescribed bark and columbo mixt—wine and a solution of sal soda for constant drink. Sept. 25th, both mammæ entirely removed by emaciation; a small abscess near the nipple on the right mammæ; fungus is growing in the large ulcer. Applied the precipt. rub., freely, which soon suppressed it, and changed the nature of the ulcer to healthy granulations. October 17th, ulcers have a healthy appearance. Tonics continued. From this time she continued to improve, and now enjoys perfect health, and menstruates regularly. Two years have elapsed since her recovery.

FROM ONE OF OUR CORRESPONDENTS.

SMALL-POX.—In Connecticut, where our health laws have always been rigidly executed, the small-pox has never been suffered to prevail extensively, or even to spread over a single town. We consider ourselves, therefore, as much better situated to determine certain points, than our brethren who reside in large cities, where this disease is seldom, if ever, entirely extinct. One of the most prominent of these points is, that in our latitude the small-pox never arises spontaneously, but that here it is always the result of specific contagion. We are as decidedly convinced of another fact, which is, that *the chicken-pox is an entirely distinct disease from the small-pox*, having no more connexion with it, directly or indirectly, than psora has with syphilis. Our chicken-pox attacks those who have previously had the small-pox, and those who have not had it. The small-pox is no protection against the chicken-pox, nor is the chicken-pox the least guard against the small-pox. We agree, that there is, occasionally, a spurious varioloid pustule,* that

* In those who have previously had the small-pox, or cow-pox, but I do not know that it is ever seen in those who have not before gone through

at the time, in individual cases, may not always be easily distinguished from the small-pox; though, from its appearing during the prevalence of the small-pox in the same family and vicinity, it is soon, and without difficulty in the sequel, ascertained to be a very different thing from that mild eruptive disease in children, the chicken-pox, which every few years prevails without the least appearance or apprehension of the small-pox. In this State, a *very* few cases have occurred of a second and severe attack of small-pox, a few of small-pox *after* vaccination, and there have been some instances of that spurious variety or modification of the small-pox, usually called varioloid, after cow-pox. However, neither small-pox nor varioloid has ever been diffused in an extensive or alarming degree; vaccination appearing, thus far, to be an effectual barrier against the *general* spread of either of these affections.

Extract of a letter from one of our Correspondents. DELIRIUM-TREMENS *and* CHRONIC RHEUMATISM.

It is commonly supposed that if a person labouring under *Delirium-tremens*, can only be got into a tolerably quiet sleep for a few hours, it is pretty certain that he will recover of the existing attack, and, indeed, he is out of danger for that time. Unless I misremember, Armstrong mentions one or two cases, in which, after a long and quiet sleep, the patients have waked rational, but soon been seized with convulsions, and died speedily. Within the last three months, my partner, Dr. M., and myself, have seen two cases, in which some hours' sleep was of no service. In the first, the patient had medical attendance about three days, during which, he took opium freely. At last, he slept five hours, though rather unquietly, and then waked nothing bettered of his disease. He died in about twelve hours from this time. In the second case, the patient, on the seventh day of the complaint, had about three hours' *quiet* sleep, but he also awaked without any mitigation of his symptoms, and died, likewise, in about twelve hours. Neither of these cases were attended with any convulsions. The only other peculiarity of these cases consisted in the circumstance, that there was a greater exhaustion of the vital energies of the whole system, at the outset of the disease, than is common in cases as they occur upon an average. Both the patients were even under a middle age, and both were tipplers, and not drunkards.

In an obstinate case of pure and unequivocal *chronic rheumatism*, affecting the diaphragm, lungs, and heart, but more especially the latter, and attended, the greater part of the time, with very considerable pain in the seats of the complaint, and also with distressing dyspnœa, and extremely irregular pulse—irregular as respects frequency, (being sometimes not more than 80, and sometimes 180)—irregular as respects the succession, fulness and strength of the beat—a case which had been of a month's duration, and had resisted guaiacum, stramonium, capsicum, tincture of lytta, arsenite of potassa, alcohol, opium, and conium, both in succession, and in various modes of combination, the tincture of *lobelia-inflata* began to produce benefit in twenty-four hours, and gradually improved the case more, in three or four days, than all that had been done previously. This patient took fifty drops, seven times in the twenty-four hours, of a mixture of three parts tincture of lobelia-inflata, and one part tincture of opium. His sus-

one or other disease. The nurse's small-pox has occasionally been noticed, time immemorial, upon the attendants in small-pox, sometimes accompanied with a considerable fever for a day or two.

ceptibility was such, that a fluidrachm would be rejected from the stomach. As soon as the system got fairly under the influence of the lobelia, the pulse became perfectly regular. The patient now considers himself as completely cured, at least for the time being.

Case, in which the operation of Paracentesis Cerebri *was performed to effect Delivery.* By I. S. Rose, M. D., of Philadelphia.

March 14th, 1824, at 3 o'clock, A. M., I was called on to visit the wife of C. W., (at Hamiltonville,) who was in labour with her first child, and, upon inquiry, was informed she had been in labour eight or ten hours. Upon examination per vaginam I found the os uteri fully dilated, the head presenting according to the second position of Baudelocque; but, although the pains were very strong, and the head somewhat moved by each and every contraction of the muscles, engaged in the expulsive effort, yet it did not descend into the inferior strait. Having fully convinced myself by frequent touching, that the detention of the head in this position, was not caused by either a contracted pelvis, rigidity of the soft parts, or a want of contractility of the uterus, but rather a preternaturally large size of the head, from accumulated fluid, I made the following candid statement to the patient and her friends, viz.: That the child could not be born without the aid of instruments; that my belief was, the head was dropsical; and that, in all probability, a perforation of the scalp to evacuate the water, would injure the brain, and, consequently, destroy the life of the child. The pains now (thirty-six hours after the commencement of labour) being weak, I gave her 40 grs. of secale cornutum, which considerably increased them, and brought the head more firmly against the projection of the sacrum. Although the sutures were widely separated, I preferred puncturing the scalp through the posterior fontanele, which I accordingly did, carefully guarding the instrument against injuring the soft parts of the mother; as soon as the scalp was open, the water flowed freely into a basin, previously fixed to receive it, amounting to upwards of a quart. The child came forth, with three or four more pains, cried lustily, and appeared perfectly well. An anodyne was now administered to the mother; and, after examining the head, and finding that the scalp alone had been injured, I dressed it with lint and simp. cerate, and left them both doing well; the wound healed by the first intention, and the child continued to thrive for twenty-three days, when I was called suddenly to it in consequence of its having fits, as the father stated. When I arrived, I found the head much enlarged, and the sutures separated, with convulsive motion of the muscles of the right side. I proposed again puncturing the scalp, but the parents and friends opposed me strongly. The ordinary remedies were employed, and in a few hours it expired.

On examination after death, I found very nearly a quart of water within the cranium, and no inflammation of the lining membrane at the place of puncture.

Smellie and others mention similar cases of hydrocephalus, occurring in utero, but the child was always born dead.

Extract of a letter from Dr. John Gridley, of Aurora, Cayuga county, New York.

I take this opportunity of stating to you an occurrence, which proves, conclusively, that bodies may remain a long time in the trachea without much inconvenience.

A lad, about nine years of age, at school, accidentally swallowed, as was

supposed, a pencil of lead. At the time, some coughing, and choking, and difficulty of breathing were produced, which passed off entirely in a day or two, without exciting any uneasiness to the parents of the child. During a period of about six years, the boy had frequent attacks of symptoms of worms, as they were pronounced by his friends, such as difficulty of breathing, coughing, sense of suffocation, and uneasiness about the throat, which were apparently relieved by some domestic vermifuge, the circumstance of his having swallowed the pencil being entirely forgotten. A few weeks since, the lad being engaged in sawing a log with a cross-cut saw, in company of his father, his body being considerably bent forward, was seized with a fit of coughing, which ended with throwing up the pencil of lead he swallowed about six years before. The pencil was identified by his brothers and other boys who were at school with him at the time he swallowed it; and the above circumstances confirmed by his father, who is a most worthy man, belonging to the society of friends, and whose veracity cannot be suspected by any who know him. The pencil weighed three pwts. and nine grains—was cylindrical, and measures, in length, one inch and 6-10ths of an inch.

February, 1828.

VARIOLOID.—Dr. Jackson, of Boston, in answer to some inquiries respecting the varioloid or modified small-pox, has published in the Daily Advertiser his opinions on that subject, formed from observations made by physicians in Edinburgh, London, Paris, Philadelphia, New York, and some smaller places. "In all these places," he says, "we find the same observations confirmed; these are,

"1st. That small-pox, in a modified form, may appear in those who have once undergone that disease, whether in the natural way, or by inoculation. This modified disease is now called the varioloid disease. It has sometimes been fatal.

"2nd. That the same varioloid disease may appear in those who have undergone the cow-pox; although it would seem to have been more rarely fatal in them than in those who have before had the small-pox.

"3d. That the varioloid disease is the same as the small-pox, except so far as it is modified by the state of the constitution, in the person who suffers it; and that, accordingly, the matter generated in it will produce the perfect small-pox in those who have never had either that disease or the cow-pox.

"Thus it appears that the shield on which so much reliance has been placed, to defend us from the small-pox, has been pierced by the shafts of that malignant disease. But we have this consolation left, that though we may be wounded by those shafts, they are deprived of their venom by the guard we may throw about us. In other words, if we cannot always avoid the small-pox, we may protect ourselves by vaccination from much of the suffering, and almost entirely from the danger of that disease.

"Let me add, that where the varioloid disease has prevailed, it has often happened that all the cases have been called by that name, including cases of real small-pox, in persons who have never been protected either by that disease or by cow-pox. And thus we have heard of many deaths from this disease called the varioloid. But, as I understand the matter, almost all those deaths have occurred from the genuine small-pox. Hence the varioloid disease has had a worse reputation than it deserves."

To the Editors of the American Medical Recorder.

GENTLEMEN,—In reading a paper, by Dr. Dewees, on the secale cornutum or ergot, which you will find in the second number of the American Jour-

nal of the Medical Sciences, I was much surprised to meet the following passage: "The ergot may be used with a fair prospect of success, when the head of the child has been left within the cavity of the uterus after the delivery of its body, when no objection can arise from the unhealthy condition of the pelvis;" and cannot help animadverting on it, because it is calculated to misguide the thoughtless and inexperienced, coming from an author whose name must carry weight and authority, derived from the elevated rank which he holds in one of the distinguished Universities of this country.

It has ever been the practice of every distinguished practitioner, in every country, under circumstances therein described, to have immediate recourse to manual or instrumental aid to effect the delivery of the child. It is well known that delay, however short, momently increases the danger to which the life of the child is exposed—this is a universal experience; and we cannot conceive what could have induced Dr. Dewees so far to depart from the beaten track, as to recommend that the life of the child should be intrusted to so uncertain a remedy as the secale cornutum, having at hand a speedy and certain relief in the manual or instrumental interference of his art. We say *uncertain*, for we know of no internal remedy in the whole range of the materia medica, which invariably produces the same effects; and that the secale cornutum is also liable to this objection, is what we cannot doubt, for we have it on the authority of the author himself, who assures us, that it sometimes acts almost instantaneously, on other occasions that it requires from twenty minutes to half an hour to produce its effects, and, sometimes, that it fails altogether. Is there wisdom in such council?

A Correspondent.

March, 1828.

Medical Biography.—We understand that the American Medical Biography, by James Thacher, M. D., &c. is in the press of Messrs. Richardson & Lord, Boston, and will be published this spring, the work being nearly printed. We learn from a highly respected correspondent, who has had an opportunity of examining the sheets, that it appears to have been carefully and well compiled, and that it is a work of much interest and utility. Such a work has been much needed to elucidate the medical history of our country, and we do not doubt it will meet with encouragement from the American medical profession.

The same publishers have also recently presented us with an edition of *Bichat on Life and Death*, translated by Dr. F. Gold, with notes by Magendie, translated by George Hayward, M. D., of Boston; and Mr. John Grigg, of this city, has recently published the *Pathological Anatomy of Bichat*, from an autographic manuscript of the last course of lectures of "the immortal author of the *Anatomie Générale*," by Professor Béclard, translated by Joseph Togno, student of medicine of this city.

We conceive that the translators of these two valuable works deserve well of the profession, for the faithful execution of their tasks; and we believe the works will soon be found in the library of every one, who pretends to keep pace with the improvements of medical science.

Extract of a letter from our distinguished correspondent, Dr. Gerson, of Hamburg.

A subject which is now attracting the attention of practitioners in the north of Germany, is the non-mercurial treatment of syphilis; it has been introduced here in the hospital, where a considerable number of recent

cases are admitted; all the women who make a trade of their profligacy, being inspected once a week, and those infected compelled to go into the hospital.

This plan has been adopted in the military hospital, Brunswic, by Mr. Forkels, and, lately, it has been introduced into one of the large hospitals of Copenhagen, by Professor Wendt. As far as observations go, particularly here, it appears that recent infections yield very readily to the antiphlogistic treatment, with rest—how far this plan protects from secondary symptoms, it is difficult to find out here, and, I understand, in Brunswic, as in Edinburg, that they appear in a great proportion, one in ten or twelve. One question, and it appears to me of great moment, has scarcely been considered, viz. what was the characteristic appearance of those sores, subsequent to which, secondary symptoms have followed, and those in which recovery has been the result of the non-mercurial practice? A correct report of cases is much needed.

A remedy, which has proved very efficacious in many cases of secondary lues, is the decoctum Zitmanni, already recommended, nearly fifty years since, in Mr. Thedeas' works, and now brought forward by Professor Chilius, of Heidelburg. Zittmann was a regimental surgeon, in the Prussian army: the following are the formulæ.

Decoct. Zittmanni fort.

℞. Rad sarsapar.	℥xij.
Coq. c. aq. font	lb.xxiv.
Per ¾ hor. imitte saccul. cui insint alum. sacchar.	℥iss.
Merc. dulc.	℥ss.
Cinnab. antim.	℈j.
Sub. fin. coct. adde fol. sennæ	℥üj.
Rad Glycrr.	℥iss.
Sem. annis.	℥ss.
Ad. col.	lb.xvi.

Decoct. Zittmanni mitius.

℞. Resid. decoct. fort.	
Rad. sarsapar.	℥vj.
Coq. c. aq. font.	lb.xxiv.
Sub. fin. coct. adde	
Cort. citri.	
cinnam.	
Cardamoni.	ā ā ℥üj.
Rad Glycrr.	℥vj.
Ad. col.	

This remedy is used in the following manner: the patient is put on a low diet for a few days, then takes one day a purge of calomel and jalap in pills; lays in bed, and drinks, every morning, a bottle of the decoct. fort. warm, and every afternoon, one of the decoct. mitius. After having used four bottles of each, he again takes a purge; the next four days he employs it in like manner, and on the tenth takes another purge; then, for a week after, the simple decoction of sarsaparilla. During the time he takes the compound decoction, the diet is as low as possible, simply a few cups of broth, and two ounces of bread per day. The compound decoction contains the oxymuriate of mercury in the proportion of nearly a grain in the bottle.

I suppose you have heard of the epidemic which has raged on the borders of the north sea, and which, in the opinion of many, arose from the same causes as the yellow fever, and would have been as destructive, had it occurred under a lower latitude: a return of it, though not to the same extent, has shown itself this autumn. The swamps existing in the countries affected, which were considerably increased by the inundation of 1825, and the extreme heat of the summer of 1826, have, no doubt, had the greatest influence in the production of this epidemic.

OBITUARY NOTICE.

"MEMENTO MORI."

To the Editors of the American Medical Recorder.

GENTLEMEN,—In conformity with your request, I have exerted myself to become acquainted with the early history of Dr. Holcombe, but have found nothing connected with it that can be interesting to the readers of your valuable journal.

So far as I have been able to learn, he exhibited none of those traits of intellectual superiority in his childhood which shone so conspicuously in his after life, and which rendered him one of the most useful members of society, while it imparted a charm to his conversation that bound the attention of all who heard him captive to its spell. "He was born of respectable parents in Lambertsville, New Jersey, in March, 1786." At the age of sixteen he entered Princeton College, and received the baccalaureate three years afterwards.

While a student in that institution, he sustained the character of a superior scholar, and occasionally exhibited flattering specimens of that excursive fancy, and correct and delicate taste, which characterized, in a peculiar manner, his subsequent poetical effusions.

Having completed his academic course, he selected the profession which seemed to comport best with his humane and benevolent feelings, and entered the office of Dr. Bellville, of Trenton, as a student of medicine. With that gentleman he remained the usual period, and, on leaving his office, took a license from the medical society of his native state. He did not graduate in medicine, but with his reasons for not doing so, I am unacquainted. The medical college of Baltimore, however, impressed with a just sense of his professional superiority, in the spring of 1826, conferred on him the honorary degree of M. D.

In February, 1808, he accidentally became acquainted with Dr. Thomas Montgomery, of this village, who had long enjoyed the respect and patronage of one of the most populous and extensive districts in the state; but was now incapacitated, by declining health, any longer to sustain the hardships of a country practice, and, as he had determined to remove to the city of New York, invited Dr. Holcombe to occupy his place, and take charge of the business which he had so long and so respectably held. Early in the following month the subject of this sketch removed to Allentown, and was introduced at once, through the influence of Dr. Montgomery, to a very respectable practice, both as regarded the number of his employers, and their standing in society. The success which attended his prescriptions, united to his urbane and feeling deportment in the discharge of his professional duties, served to reconcile the public to the loss of their old physician, and convinced them that he had been actuated solely by a regard for their welfare, in recommending Dr. Holcombe to their notice. Extensively engaged in the practice of his profession, he continued to dispense the blessings of medicine until the fall of 1815, when he was called upon to represent the county of Monmouth in the state assembly, and was elected a member of that honourable body, in which he continued two years, when, believing that he could be more extensively useful in his professional character, he resigned his seat in the legislature. He now devoted himself entirely to the discharge of those tender duties which are incumbent on the physician, and, by the benevolence of his heart, and the soothing mildness

of his manner and expression, in many instances rendering disease less painful to the subject of it, than to his own feelings. His business, from this period, was limited, only by his inability to attend to it, if further extended; and I am free to say, that a more general and implicit confidence never was reposed in the skill of any physician.

In the profession of medicine, it is by no means uncommon for an individual to obtain distinction in some one of its departments; but it was the fortune of our friend, in most of them, to soar high above mediocrity. As an obstetrician, Dr. Holcombe stood deservedly high, and many are now living to impart and to receive the benefits and enjoyments of society and life, who, if inferior minds had presided at their birth, would never have known the pleasures or the pains of existence. That department of the science which has for its object the investigation, prevention, distinction, and treatment of those diseases which originate in deranged function, or malconformation of organs, is confessedly the one which calls for the most vigorous exercise of the highest faculties of the mind; and from what has been already said of the intellectual powers of Dr. Holcombe, it may be at once inferred that here he would be pre-eminently distinguished; and such was the fact. Chained to the dogmas of no sect, and bound to no authority but reason and experience, he firmly, though respectfully, opposed his opinions to those of the highest in the profession, whenever a different view of the case submitted to their judgment, led him to a different conclusion respecting its nature; and where the disease was remediless, post mortem examination, or a more rapid improvement where it was relievable, generally bore testimony in favour of his opinion.

The nice shades of difference which exist between, and serve to distinguish the different affections of the skin, are so minute in many instances, as to escape the notice of inferior perceptions; but the well practised eye and mature judgment of him whom we lament, detected at a single glance the most delicate touches of difference, and applied, at once, with a success almost unparalleled, the appropriate remedy.

In the midst of his brilliant career of professional usefulness, he was again called on, in the winter of 1821, to serve the public in the high political station of representative to the U. S. congress; which trust he had not long held, before he gave unequivocal testimony to his constituents that he was equally qualified for distinction on the floor of congress, as to administer to their relief when assailed by accident or disease.

I have lately heard it asserted by a colleague of his, that "the representation by Dr. Holcombe was one of the most enlightened that New Jersey had sent for many years;" and it is only necessary to refer to the result of the last election, to show that this was the general impression on the minds of the people of his native state. The cause of justice and humanity always found a warm and able advocate in this excellent man, and though unaccustomed to public speaking, yet we believe the claims of Mrs. Decatur, as presented to congress, were urged by Dr. Holcombe, with an eloquence and pathos that might challenge a comparison with the best specimens of elocution exhibited there during that session.

The last painful duty left us to perform toward this great and good man, is to trace the progress of that disease which deprived New Jersey of one of her brightest ornaments, and the district in which he resided of its best friend. On his return from Washington city, after the adjournment of the last congress, it was evident to his friends that his health had suffered since he last left them, though he did not himself seem conscious of the existence of any particular indisposition. About the middle of the following summer, however, he became sensible that he was labouring under a disease which he believed to be situated in the liver, and commenced a course of remedies for its relief, but still continued to pursue his professional labours

until the month of October, towards the close of which, he found it necessary to confine himself to his room. He now complained of extreme debility and a total want of appetite. He was greatly emaciated, and harassed with alternate constipation of the bowels and diarrhœa. I am unacquainted with the plan of treatment he had pursued in the management of his case, but believe that no regular one was adhered to. He had taken mercury in small doses as a part of the system; and, in a conversation I had with him, relative to his complaints, on the 7th of December, I suggested to him the possibility of his labouring under "phthisis," (a suggestion I was led to make more from the expression of popular opinion than from any knowledge I possessed of his symptoms;) he explicitly declared that he never had a symptom that could justify such an opinion. About a fortnight previous to this time, an abscess, which had formed in the perineum, and which had given him a great deal of pain, broke, and discharged a considerable quantity of pus. This was still open, and matter continued to ooze from its orifice. He was entirely ignorant of the extent of its cavity, as no person had ever examined it, and, as he expressed no wish to have it done at this time, my services were not offered to perform it. On the 25th of December, I saw him again, and it was now quite evident to me that he could not much longer survive. His debility and emaciation had increased to such a degree, that he was the mere shadow of his former self, and the articulation of a few short sentences, so completely exhausted him, that he fell asleep as soon as they were finished. Since my previous visit to him, he had suffered very much from pain in the perineum and neighbourhood of the anus, which was increased to agony at every attempt to evacuate his bowels. Another abscess had formed and discharged its contents through the orifice of the former one, and, in addition to these torments, he was harassed with several violent paroxysms of coughing in the course of each day; his mouth and throat were beset with ulcers, he had hectic fever, and the hippocratic expression was deeply stamped upon his features. He now expressed a desire to have the abscess in the perineum examined, and requested me to call the next day for that purpose; accordingly, at 10 o'clock, on the following morning, I waited on him, and examined, for the first time it ever had been, that disease which had been at different times very painful to him, and which had served to render, by its irritation and discharge, the last weeks of his existence still more burthensome and oppressive. I placed him on a lounge, and properly exposed and prepared the parts; when introducing a probe into the orifice of the abscess, which was situated on the anterior verge of the anus, directly behind the termination of the raphæ, I passed it anteriorly along the perineum, nearly to the *root* of the scrotum, and the whole width of the perineum. This vacuity appeared to be the unoccupied cavity of an abscess, rather than a fistulous sinus, though, in the neighbourhood of the rectum, the pus was burrowing more deeply. This intestine was detached from its natural connexion anteriorly, for somewhat more than a third of its circumference; and on the right side of the raphæ I passed the probe to the depth of an inch, and on the left to nearly the same extent. The next day I called to see him again, and filled the cavity with a pledgit of soft, fine linen, covered, on both sides, with basilicon ointment. This I advised him to have removed in the evening, the parts properly cleansed with castile soap and water, and a dressing of the same kind re-applied. I did not see him again until the 2nd of January, at which time there was no evident alteration in his symptoms, except that the paroxysms of coughing were more frequent, and the powers of life were gradually yielding to forces which they could no longer successfully oppose. The dressings which I advised had not been re-applied, nor any others in their stead, and his debility was so extreme, that I did not think proper to recommend any thing further in his case. Without any conversation with him, I took my leave, and received, for the last time, that hand, which now lies cold and powerless

as the clods that cover it, and which was never withheld from the needy, when, by stretching it forth, he could relieve their distresses.

To show that his death was as triumphant as his life had been useful, I beg leave to insert the following, from a "brief sketch" of his life, appended to the funeral sermon of Dr. Holcombe, preached by the Rev. Henry Perkins, A. M., pastor of the presbyterian church at Allentown, which was published at the request of his friends.

"For three or four weeks before his death, he appeared to be calmly resigned to the divine will, whatever it might be. The precious truths of God's word, in his own language, were his 'meat and drink.' To read, to hear, and to meditate upon these, brought a relief and a happiness, which the kind offices of friends could not afford. Such scriptures as these, that Christ 'died for our offences, and rose again for our justification;' that 'he bore our sins in his own body on the tree;' that 'by his stripes we are healed;' filled his mind with adoring gratitude. 'There were a few reasons,' he said, 'which made him wish, if it were God's will, to be restored to health: that he might be made a blessing to his family; that he might have opportunity to prove the reality of his faith; and that he might do something for the cause of Christ in the world.'

"His desires, in these respects, were not realized, but he was supported, and did not complain. Shortly after this, when he found his strength rapidly declining, and death very near, he spoke also of greater peace, and of brighter hopes than he had before enjoyed. On being asked how he felt in the near view of eternity, he answered, 'happy,' and added, 'Oh! what should I *now do* if my peace were not made with God!' It now becoming apparent to him that he should not live to receive the sacraments of the church in the public, ordinary way, as he had anticipated, and still feeling a desire to have the benefit of those ordinances, he made known his wish that they might be administered in private. He was, accordingly, on the evening of the day on which he expressed such a desire, dedicated to God, in baptism. In consequence of his extreme weakness it was judged adviseable to defer the administration of the Lord's supper until the next morning. In this, on its being mentioned to him, he also concurred. But before the time arrived, he had gone, as we hope and truly believe, to a richer feast, 'to the marriage supper of the Lamb.'

"He died, about two o'clock in the morning, January 14, in the forty-second year of his age.

"A wife, and five children, with whom he had shared a large portion of domestic happiness, remain to mingle their tears together, as they realize the greatness of their loss; and as they receive the condolence and sympathy of hundreds, who knew his worth as a humane and skilful physician, as a tried and ardent friend, and last, but not least, as a christian.

"On Wednesday, January 16th, after the delivery of the sermon which precedes this notice, his remains, followed by his relations and a vast concourse of thoughtful spectators, were borne from his late residence, to the presbyterian burying ground, and committed to the grave, in hope of a blessed resurrection." W. F.

Dr. Holcombe, a considerable time before his death, promised us a communication, on the diseases within his circle of practice, which was wide and extensive. Dr. H. was considered one of the most successful practitioners in New Jersey; he was decidedly opposed to the principles and practice of the advocates of the fashionable French school of medicine.

We are promised some papers, left by Dr. H., from which, we have no doubt, we shall be able to select something interesting for a future number.

EDITORS.

EXTRA-LIMITS.

We trust our friend Dr. Leo-Wolf will excuse our publishing his interesting history of a German Medical Education, in this department of our Journal. Our motive for so doing is, that it may accompany the Proceedings of the Northampton Medical Convention, and the selections from the Transactions of the New York Medical Society; particularly, as the subjects are so intimately connected.

Dr. L.-W. has only been in this country a few months; we mention this fact, inasmuch as we have never before met with an instance in which so great a proficiency has been made in the English language in so short a space of time. It reflects upon him infinite credit, and we hope to profit largely hereafter from his labours.—Eds.

Medical Education in Germany. By Dr. Joseph Leo-Wolf* *from Hamburg, now of New York.*

The German universities are schools, where all the principal sciences are taught, and which have the privilege to confer degrees in every principal science, viz. *Doctor Medicinæ et Chirurgiæ*, *Doctor Theologiæ*, *Doctor Jurisprudentiæ*, *Doctor Philosophiæ*. Every university is divided into faculties, and has a theological, juridical, medical, and philosophical faculty. The professors of each faculty consist of three different classes, namely:

1. *Docentes.* These are graduated men who are licensed to teach; they have no salary from the government, but only the revenue of their tickets, from each student who may attend their lectures.

2. *Professores extraordinarii.* If a Docent has lectured with applause during the course of several years, he is rewarded by the government with the title of "Professor extraordinarius;" still, however, he is only paid by his tickets, and but in extraordinary cases, he has a certain salary from the government.

3. *Professores ordinarii.* These particularly form the faculty, and they have, besides the revenue of 1000 to 5000 dollars from their tickets, a fixed salary from the government, of 500 to 3000 dollars. A professor extraordinarius has the first claim for the title and place of a professor ordinarius, if by any cause a vacancy takes place in the faculty, consisting always of a certain number of professores ordinarii.

Every one who intends to be *matriculated* as a student of any faculty, and such only have the privilege to attend the lectures, must prove by the testimony of the school where he received his previous classical education, that he is in possession of so much scientific information as will enable him to attend the university with a happy result; namely: he must have studied the Latin and Greek languages, mathematics, geography, history, modern languages,

---

* I refer to the "*Account of the Medical Institutions at Berlin, by Dr. T. F. Andrews of Norfolk*," published in this Journal, Vol. VI., and shall only add, what he has not sufficiently explained, as his account is otherwise perfect.

J. L-W.

&c. to a generally stated perfectability, which is pretty high; for instance, he must be able to translate immediately, without the assistance of a dictionary, every Latin and Greek classic work. If the school is not sufficiently well renowned, or if the young man has received his education privately by teachers, having attended no public school, he is obliged to undergo an examination at the university where he intends to matriculate, for proving his capacity to attend the university.

By the matriculation one enjoys all the rights and privileges of a student, and is enabled to make full use of all the literary establishments of the university, viz. the library, the botanic garden, the anatomical, zoological, and mineralogical museum, &c.

The *lectures* are delivered within the course of a *semester*; the *winter-semester* lasts mostly from the first of November to the end of March, and the *summer-semester* from the first of May to the end of September; a few lectures endure for two semesters. The lectures are delivered once, twice, three times, and even six times a week; some of them two and three hours daily.

During the course of his studies a student most generally attends more than one university. In the larger universities there are generally several teachers in the same branch, and the student has the full liberty to choose whom he will attend, or of whom he hopes to get the best instruction. During their studies the students are not liable to any literary control, but may pursue their studies just as they like.

The *professor* has either a free discourse, or has recourse to a manuscript of his own, or to a printed compendium. The students generally write down immediately the whole lecture of the professor, to have a guide for their studies at home.

Though every student may pursue his education and studies as he pleases, still a systematical order and plan is stated for every principal science, and every one endeavours as much as possible, to follow this plan.

The way, in which a *student of medicine* in Germany generally performs his studies, is the following:

The period of the *academical course* is stated for four years, and begins at the commencement of a summer-semester.

FIRST SEMESTER.

Preparatory studies, namely:

1. *Philosophy*, and particularly Logic, Metaphysics, and History of Philosophy; 2. *Medical Propædeutic;* 3. *General Botany;* 4. *Osteology* and *Syndesmology.*

SECOND SEMESTER.

This is particularly for the examination of inanimate nature.

1. *Anatomy*, and *practical* exercises in dissecting; 2. *Physics;* 3. *Chymistry;* 4. *Zoology.*

THIRD SEMESTER.

The body in a state of health particularly.

1. *Physiology;* 2. *Psychology;* 3. *Mineralogy;* 4. *Medical Botany;* 5. *Comparative Anatomy;* 6. *Pharmacy.*

FOURTH SEMESTER.

The body in a state of disease, and the remedies.

1. *General Pathology* and *Therapia;* 2. *Semiotic;* 3. *Materia Medica;* 4. Again *Anatomy* and *practical* exercises in dissecting.

FIFTH SEMESTER.

The body in the state of curing.

1. *Special Pathology* and *Therapia;* 2. *Surgery;* 3. *Midwifery;* 4. *Ophthalmology;* 5. The *art of prescribing.*

SIXTH SEMESTER.

1. The *Diseases of the Mind;* 2. *Forensic Medicine;* 3. *Theory and Practice of Surgical Operations* upon the dead body; 4. The *art of applying bandages;* 5. *Medical History* and *Literature;* 6. *Visiting* of the *Hospitals* of *Medicine*, *Surgery*, and *Midwifery.*

SEVENTH SEMESTER.

1. *Pathological Anatomy;* 2. *Practice* in the *Hospitals* of *Medicine, Surgery* and *Midwifery.*

EIGHTH SEMESTER.

1. *Practical exercises in the Hospitals* continued; 2. *Repetition* of lectures, particularly desired; 3. *Preparations for examination.*

Besides these lectures many other particular lectures are attended, just as it is convenient, viz. *Particular Anatomy of the Arteries* and *Nerves, Anatomy of the Fœtus,* on *Electricity and Magnetism,* on *Syphilis,* on *Diseases of Females, Children, Tradesmen,* &c. Moreover at the request of the students, *Examinations* are established in the different branches, for their better instruction.

For a more perfect view of the German system of Medical Education, I shall give a copy of the Catalogue of Lectures, delivered during a summer-semester, at the university of Berlin.

Catalogue of the Lectures delivered on Natural and Medical Sciences, at the university of Berlin, for the summer-semester of 1825.

I. NATURAL SCIENCES.

Professor Turte.—*Experimental Physics;* twice a week, from 3 to 5 o'clock,

Professor Fischer.—*Electricity, Magnetism,* and *Light;* four times a week, from 3 to 5 o'clock.

Professor Erman.—On *Light and Heat;* three times a week, from 10 to 11 o'clock.

Dr. Von Honning.—The *Doctrine of Colour,* according to the principles of Mr. Goethe, explained by experiments; twice a week from 12 to 1 o'clock.

Professor Erman.—*Meteorological Atmospherology;* three times a week, from 2 to 3.

Professor Rose.—*Theory of Analytic Chemistry.*

Professor Mitscherlich.—*Introduction to Experimental Chymistry;* once a week.

Professor Rose.—*Practice of Experimental Chymistry;* four times a week.

Professor Turte.—*Experimental Chymistry;* four times a week, from 5 to 7.

Professor Mitscherlich.—*Experimental Chymistry.* in aid of the Compendium of M. Berzelius; six times a week from 10 to 12.

Professor Mitscherlich.—*Chymistry,* with a particular regard to the *Science of the Forest;* twice a week, from 10 to 11.

Professor Hermbstaedt.—*Introduction to Theoretical Chymistry,* with regard to *Pharmacy and Medicine;* twice a week, from 10 to 11.

Professor Hermbstaedt.—The Doctrine of the *Preparation and Knowledge of Chymical Remedies,* explained by experiments; four times a week.

Professor Lichtenstein.—*General Zoology;* six times a week.

Professor Lichtenstein.—*Natural History of the Birds of Prey;* twice a week.

Professor Link.—*General and Particular Botany;* daily. Besides which he will deliver *Demonstrations,* and will make weekly *Excursions* with his students.

Professor Hayne.—*General Botany;* daily.

Professor Hayne.—*Botany of the Forest;* three times a week. He will make once a week, *Botanical Excursions* with his pupils.

Dr. Rose.—*A short view of Mineralogy;* four times a week.

Professor Weiss.—*Geognosy;* four times a week.

Professor Weiss.—The first part of the *Science of the Soils for the use of Forest-officers;* twice a week.

II. MEDICAL SCIENCES.

Professor Rudolphi.—Publicly, *Medical Encyclopædia and Methodologia;* twice a week.

Professor Wolfart.—Publicly, *Medical Encyclopædia;* twice a week.
Dr. Schultz.—*Encyclopædia of the Natural Sciences;* four times a week.
Professor Knape.—*Osteology;* four times a week.
Dr. Schlemm.—*Angiology and Neurology;* twice a week.
Professor Rudolphi.—*Comparative Anatomy;* four times a week.
Professor Rudolphi.—*Physiology;* daily.
Professor Horkel.—*General Physiology;* five times a week.
Professor Horkel.—Publicly, *Introduction to Physiology;* twice a week.
Dr. Schultz.—*Physiology of Plants;* four times a week.
Dr. Schultz.—Publicly, the *Theory of the Generation of Plants and Animals;* twice a week.
Professor Shubart.—*Materia Medica;* daily.
Professor Osann.—*Materia Medica;* five times a week.
Professor Wagner.—*Materia Medica;* five times a week.
Professor Link.—*On Medicinal Plants;* three times a week.
Professor Schubart.—*Pharmaceutic Chymistry;* daily.
Professor Knape.—The *Art of Prescribing;* three times a week.
Professor Caspar.—The *Art of Prescribing;* three times a week.
Professor Hufeland, junior.—Publicly, *Pathology;* twice a week.
Professor Reich.—*General Pathology;* four times a week.
Dr. Boehr.—*General Pathology;* four times a week.
Dr. Eck.—*General Pathology;* four times a week.
Professor Horn.—*Particular Pathology;* four times a week.
Professor Hufeland, senior.—*Semiotic;* three times a week.
Professor Hufeland, junior.—*Semiotic;* three times a week.
Professor Reich.—*General Therapia;* four times a week.
Professor Hecker.—*General Therapia;* twice a week.
Dr. Oppert.—*General Therapia;* three times a week.
Professor Wagner.—The *General Part of Practical Medicine*, containing *General Pathology*, *Materia Medica* and *Therapia;* four times a week.
Professor Hufeland, junior.—*General Therapia*, and the *First Part of the Particular Therapia*, daily.
Professor Wolfart.—*Particular Nosology and Therapia;* daily.
Professor Rust.—Publicly, the *Doctrine of Syphilitic Diseases;* twice a week.
Dr. Oppert.—Publicly, on *Syphilitic Diseases;* twice a week.
Professor Horn.—*Particular Pathology and Therapia of the Diseases of the Mind;* twice a week.
Professor Reich.—*Doctrine of Contagious Diseases;* twice a week.
Dr. Barez.—Publicly, the *Diseases of Children;* twice a week.
Professor Osann.—Publicly, the *Diseases of Tradesmen;* twice a week.
Professor Graefe.—*Surgery;* four times a week.
Professor Juengken.—*General and Particular Surgery;* four times a week, from 4 to 6.
Professor Rust together with Professor Kluge.—*Operative Surgery* (*Akiurgia*); three times a week from 6 to 8. The *Demonstrations* and *exercises* for all *operations upon the dead body* take place in particular lessons under the direction of both professors.
Professor Kluge.—*Doctrine of Surgical Bandages*, twice a week, from 10 to 12.
Professor Kluge.—Publicly, on *Fractures and Luxations;* twice a week.
Professor Juengken.—Publicly, on *Surgical Bandages.*
Professor Siebold.—Publicly, the *Practical part of Midwifery*, in aid of his compendium; twice a week.
Professor Kluge,—*Midwifery;* twice a week, from 3 to 5. The information and exercises, belonging to these lectures, are delivered in particular lessons.
Dr. Friedlaender.—*Theoretical and Practical part of Midwifery;* three times a week.
Professor Siebold.—*Exercises in Touching*, and in the *manual and instrumental operations of midwifery;* four times a week.

Professor Berends.—*Advice for Medical Practice* in the *Medico-Clinical Institution of the University;* daily from 11 to 1.
Professor Hufeland senior, assisted by Professor Osann and Professor Busse.—*Medico-Surgical Practice in the Policlinical Institution;* daily.
Professor Wolfart.—*Advice for Medical Practice.*
Professor Graefe together with Dr. Schlemm.—Exercises in *Surgical Operations upon the dead body;* twice a week.
Professor Graafe.—*Clinic for Surgery and Ophthalmology, in the Surgico-Clinical Institution of the University;* daily.
Professor Rust.—*Clinic for Surgery and Ophthalmology,* in the *Clinical Institution for Surgery and Ophthalmology in the Hospital of Charity;* five times a week from 9 to 11.
Professor Von Siebold.—*Clinic for Midwifery,* in the *Hospital of the University for Midwifery.*
Dr. Friedlaender.—*Clinic for Midwifery.*
Professor Wagner.—*Medical Jurisprudence;* four times a week.
Dr. Barez.—*Medical Jurisprudence;* four times a week.
Professor Wagner.—*Medical Polity,* twice a week.
Professor Caspar.—Publicly, *Anthropology.*
Dr. Reckleben.—*Theory and Practice of Veterinary Diseases;* three times a week.
Dr. Reckleben.—The *Doctrine of Epidemics of Domestic Animals,* and *Veterinary Jurisprudence;* three times a week.
Professor Hecker.—*History of Medicine;* four times a week.
Professor Berends.—*Interpretation of the Aphorisms of Hippocrates* in the Latin language; once a week.
Professor Hecker.—*Interpretation of the works of Celsus;* twice a week.
Dr. Boehr.—*Repetitions and Discussions on Medical and Surgical subjects.*
Professor Juengken.—Institutions for *Operations upon the Eyes.*

Instead of several of these lectures, others are delivered during the *winter-course,* viz: *Anatomy, Exercises in Dissecting, Pathological Anatomy, Pharmacy, &c.*

In all the lectures on Anatomy, Comparative Anatomy, and Pathological Anatomy, the preparations of the Anatomical Museum are exhibited. For the lectures on Zoology and Mineralogy the professors have recourse to the large Museum of the University. During the lectures on Botany every student is supplied with an example of every plant mentioned, as far as this is possible. Moreover the professor on Botany makes once or twice a week excursions with his pupils. Operative Surgery is not only taught in its whole extent with the history of every operation, but practical exercises are established for operating upon the dead body, and every student is exercised sufficiently in performing all the operations. As well for this purpose as for the anatomical exercises, a sufficient number of subjects is always to be had, because all dead prisoners, and all who die in the houses for the poor, are the property of the Medical Faculty; also those who die in the Hospitals, and whose expenses during their stay in the Hospitals, are not paid. During the 6th semester the student begins to attend the Hospitals, but only as a spectator and hearer. After having observed during this time the patients, and their treatment, he begins himself to practice in the 7th semester, under the direction of the professor. The professor makes the tour in the Hospital at certain hours with his pupils, and stops at those patients where something particularly remarkable is to be observed. A few patients are allotted to each of the practising students, and he is obliged to examine his patient in presence of the professor and of the students, and then to determine and execute the plan of treatment under the direction of the professor. After having received a new patient, the student is obliged to read, at the next meeting at the sick-bed, the history of the disease of his patient. In the Hospitals of Surgery the practising students must perform, under the direction of the pro-

fessor, the operations which may be necessary for their patients, unless these operations are too dangerous. In the same manner the practising student in the Hospitals of Midwifery has to attend the obstetric cases, under the direction of the professor. All expenses of the University, viz. for the Botanic Garden, Museum, &c. are furnished by the government, and the professors of Physics and Chymistry receive a certain sum from the government for the expences of their experiments.

When a student has finished his academical course and intends to graduate, he calls upon the Dean of the Faculty, under whom he wishes to be graduated. He then has to undergo the following:

He must prove by testimony, that he has been a student of Medicine for four years, and that he has attended the principal lectures on his profession. It is no matter, at which University he has attended the lectures; he even might have attended four different Universities, and nevertheless he can request of a fifth, to confer the degree on him, though he has never attended one of the professors of this Faculty; he will receive his degree, if, by the examinations which he is obliged to undergo, he is proved to be worthy of the title of M. D. Such are the laws in Prussia, where the laws on medical practice and medical policy are by far the most perfect.

The examinations, which the candidate is obliged to undergo, are the following:

The Dean of the Faculty alone institutes the first examination; this is called the "*Tentamen;*" he has a discourse in the Latin language, with the candidate on medical science in general, entering first upon one, and then another branch, in order to ascertain his knowledge of them generally; this lasts from one to two hours. If the candidate has stood the test, on another day the second examination begins; this is called the "*Extemporate.*" On one branch of the science he receives a question, to which he is obliged to reply in the Latin language on paper, in form of an essay. This essay is to be executed immediately after the question, in the house of the Dean, which he cannot leave before he has finished his work, for which one whole day is allowed; all books are interdicted, and the whole is to be executed under the eyes of the Dean. After this is done satisfactorily, the third examination, called the "*Rigorosum,*" begins on another day, likewise in the Latin language. This examination is conducted by all the professors of the Faculty; every one examines on his particular branch, and thus the examination is extended on Anatomy, Comparative Anatomy, Pathological Anatomy, Physiology, Botany, Chymistry, Pharmacy, Materia Medica, Pathology, Therapia, Surgery, and Midwifery. If the student passes this examination, he has no other to undergo for his graduation. He then chooses a certain subject on medical science, on which he writes a *Dissertation* in the Latin language; this must be printed at his expense, and should be distributed amongst the professors and students of the University; one hundred copies are sent to the libraries of the other Universities, and in that way all the Universities maintain an interchange of all new dissertations. Together with the publication of his dissertation the candidate exhibits some *Theses*, and on a published day he publicly defends in the Latin language his Dissertation and Theses in presence of the Dean and the other members of the Faculty. Every one has the right to oppose in the form of a discussion, the opinions of the candidate, expressed in his Dissertation and Theses. The disputation lasts generally for two to three hours, or it is finished then by the Dean, and at the same time the candidate now publicly becomes *graduated by the Dean as a Doctor Medicinæ et Chirurgiæ* and receives his diploma.

This is a short view, how a Doctor of Medicine performs his academical course. By the diploma he only has the title of a Doctor; but to acquire the licence of practising, the Doctor has to then undergo the practical examinations, called "*State-Examen.*" This is in every part of Germany very strict.

I shall give here a short extract of the new laws, which are published at

Berlin for the examination of those, who request the licence of practising in the kingdom of Prussia. They are the best proof to show, how the government has endeavoured to prevent the misfortunes resulting to society from the practice of illiterate physicians.

Extract from the Regulation for the State-Examination of Medical Men in the Kingdom of Prussia, published at Berlin, 1825.

§ 2. All State-Examinations are instituted either by the *Supreme Court for Medical Examinations*, or by the *Medical Courts of the Provinces*, or by *Medical Committees, particularly appointed for examinations.*

I. THE SUPREME COURT FOR MEDICAL EXAMINATIONS.

§ 3. This is appointed at Berlin, and its members are selected out of the most learned men in all branches of medical knowledge. The whole court is re-elected each year.

§ 5. The following have to undergo the state-examinations before the Supreme Court:

1. All graduated medical men, who wish to practise as *physicians*, or as *physicians and surgeons.*

2. All candidates of Surgery and Medicine, who wish to be licensed as *surgeons of the first degree.*

3. All pharmacuetists, who intend to be licensed as *apothecaries of the first degree.*

§ 6. Previous to an examination before the Supreme Court it is required:

1. That *graduates* must prove, that they have legally graduated, after having attended one or several Universities for four years.

2. The *surgeons* must prove by testimony or by a previous examination:

a. That they have had a sufficient school-education.

b. That they have *either* studied medicine and surgery for three years and have acquired the necessary practical knowledge in the public lectures, *or* that they have attended at least for two years the necessary lectures on medicine and surgery, and have been for two years, surgeons of a lower degree in the army or civil.

3. The *pharmaceutists* must attest, that they have learned Pharmacy, served at least for three years, and since that time attended the public lectures on Botany, Chymistry, Physics, and Pharmacy.

§ 9. The different *sections of the examination:*—1, the anatomical—2, the surgico-manual—3, the medico-clinical—4, the surgico-clinical—5, the pharmaceutical—6, the verbal end-examination.

§ 10. 1. The *graduates* must show, that they are not only practically but perfectly literary learned men.

a. If they intend to exercise the medical profession in its whole extent, and to be licensed as physicians and surgeons, (called *graduated medico-surgeons,*) they are obliged to undergo the anatomical, surgico-manual, medico-clinical, surgico-clinical, and verbal end-examinations, and in these examinations, conducted in the Latin language, not only the practical part, but likewise the historical and theoretical part of the art and science in its whole extent is to be included.

b. If they intend to be licensed only as *physicians*, they have to undergo the anatomical, medico-clinical and verbal end-examination; they must undergo likewise a surgico-clinical examination, but only as to the diagnosis and medical treatment of surgical diseases, without examination on manual knowledge.

2. The candidates of medicine and surgery, who intend to be licensed as *surgeons of the first degree*, have to undergo the anatomical, surgico-manual, surgico-clinical, medico-clinical, and verbal-end examination; but their ex-

amination is to be performed in the German language, with regard to practical knowledge only.

3. The pharmaceutists who intend to acquire the license as *apothecaries of the first degree*, have to undergo the pharmaceutical, and the verbal end-examination.

A. *The Anatomical Examination.*

§ 12. By this examination it is inquired, whether the candidate is in possession of the necessary knowledge of anatomy and of the faculty to work with the anatomical knife as much as the exercise of his profession requires it. He has to solve four questions:

1. He must demonstrate upon the dead body the intestines of the abdomen or thorax in their form, situation, and connexions.

2. He must demonstrate an anatomical preparation of arteries or nerves, particularly performed by himself for this purpose.

3, and 4. He has to demonstrate extempore two other preparations, exhibiting Splanchnology, Osteology, Angiology, or Neurology.

All these four questions are fixed by allotment, immediately previous to the demonstrations.

§ 15. The anatomical examination is to be instituted with all candidates in the same way, but as to the graduated men, scientific and pathologico-anatomical knowledge is particularly to be kept in view, and as to the others, more practical knowledge, and as to those who intend to act particularly as operators, their anatomical knowledge in dissecting is particularly to be regarded.

§ 16. Only those, who have passed satisfactorily through the anatomical examinations, can be admitted to the other sections of the examination.

B. *The Surgico-Manual Examination.*

§ 17. This examination is for the purpose of testing the operative and manual skill of the candidate; at the same time, however, the historical and scientific part of this art is not to be neglected.

1. The candidate has to write an essay on a stated subject on operative surgery; to deliver a short discourse on the subject; and to perform the operation skilfully upon the dead body.

2. He has to discourse extempore, on another proposed subject on operative surgery; to state the various methods of performing this operation and their different advantages, to prove his knowledge of all surgical instruments, and to perform the operation upon the dead body.

3. He has to solve extempore, a question relative to fractures and luxations, and to apply the bandages according to the rules of art.

§ 18. No question is permitted, which cannot be practically answered upon the dead body, viz: Extirpatio tumorum cysticorum, sectio cæsarea, &c. Questions on amputations, exarticulation, aneurisms, &c. are the most convenient for this purpose.

All these questions are determined by allotment.

§ 20. Only those who pass satisfactorily through these surgico-manual examinations can be admitted to the following clinical examinations for the approbation as a medico-surgeon, or as a mere surgeon of the first degree. Those whose manual and scientific knowledge has been proved deserving, acquire the honorary title of an *Operateur*.

C. *The Medico-Clinical Examination.*

§ 21. This is different for graduated men, and surgeons of the first degree.

§ 22. The graduated physicians and the medico-surgeons are to be charged with the care of two patients (particularly under acute diseases) in the Hospital of Charity, under the direction of two commissaries, particularly appointed for this purpose. The candidate has immediately to examine his patients in the presence of the commissaries, and has to state the ætiology, diagnosis, prognosis, and cure. During this time the commissaries have to inquire into the knowledge of the candidate in Pathology, Therapia,

and Materia Medica, by questions, adapted to the diseases of his patients. The candidate then has to exhibit the whole condition of his patient, on paper, in a particular room of the Hospital, without any assistance, and he has to deliver his writing to the commissaries. In the same manner he continues to visit his patient twice a day, and to employ the necessary remedies, and is obliged to add all new symptoms, his opinion about them, and the different remedies administered, in his clinical journal. But to avoid all harm to the patient, nothing can be done except in presence of the commissaries.

§ 23. Besides his patients, the candidate is to be examined, whenever a particular opportunity occurs, by which his knowledge of the diagnosis, prognosis, and cure of diseases can be ascertained.

§ 24. The commissaries for this examination ought to inquire particularly the knowledge of the candidate in employing the right doses of remedies, and in prescribing after the rules of Pharmacy. At the end of this clinical examination, the commissaries have to hand to the candidate some themes for prescribing different forms of remedies, viz. mixtures, decoctions, pills, tinctures, &c. and the candidate has to answer these questions on paper immediately, in presence of the commissaries. Moreover these propose him some remedies, to which he has to add immediately their doses.

§ 25. All the transactions at the sick-bed, and the journals of the candidate are to be kept in the Latin language.

§ 26. The medico-clinical examination for surgeons of the first degree, as for those who have not graduated, is to be performed under the same rules, with the exception only, that the German language is used, and that merely their practical knowledge is to be inquired into. Here the candidate must satisfy, that he possesses the necessary degree of practical knowledge, whilst the graduate must prove, that he is, besides this capacity, in possession of that scientific cultivation, which may contribute to the further improvement of the science.

§ 27. This medico-clinical examination is to be continued with every candidate for from two to three weeks.

§ 29. Only those who have passed through these examinations, can be admitted to the following.

D. *The Surgico-Clinical Examination.*

§ 31. Graduated medico-surgeons, graduated physicians, and surgeons not graduated for the first degree, are entitled to this examination, but with different modifications for the different classes.

§ 32. Every one, either physician or surgeon, must attend two patients of the surgical division of the hospital of Charity, under the direction of two commissaries, particularly appointed for this purpose. He then has to state the diagnosis, prognosis, cure, &c. to write a journal respecting the patient, &c. all in the same manner as during the medico-clinical examination, § 22. Besides, the commissaries have to seize every opportunity, and there will be always enough of them in so large a hospital, to inquire into the knowledge of the candidate about his diagnosis and cure of ulcers, tumors, indurations, degenerations, diseases of the eyes, luxations, fractures, ruptures, and other surgical complaints, and particularly about all kinds of syphilitic diseases.

§ 33. The graduated men, if they intend to practice only as physicians, without the intention of exercising surgery, have to prove, nevertheless, that they know the theory of surgical practice; but they are not to be examined on operative surgery.

§ 34. The graduated medico-surgeons and the surgeons not graduated for the first degree have to prove likewise their manual knowledge in applying bandages, and in performing operations under the direction of the commissaries as far as this can be executed without harm to the patient.

E. *The Pharmaceutical Examination.*

§ 38. The candidate has to prepare, in the presence of a commissary, two chymical preparations, which are stated by allotment. He then has to analyse a chymical composition or a mineral water, or metallic compositions, or gas, &c. Moreover, he has, for medical jurisprudence, to describe and to analyse the stomach of an animal used for this purpose. Then he has to denominate several plants for medical use, which are handed to him, and to state their use, origin, varieties and adulterations; and of some chymical preparations he has to state the mode of preparing them, &c.

F. *The Verbal End-Examination.*

§ 40. Only those who have passed through the before-mentioned divisions of the state-examen, according to the requisitions, adapted to the different classes of medical men, and to that class which they intend to enter, such only can be admitted to this examination, finishing the whole course of the state-examen.

§ 41. For this end-examination eight members of the Supreme Court for state-examination are appointed; the most learned and scientific men are alone fit for this office, and every member must be enabled to examine every candidate, physician, surgeon, or pharmaceutist, in every branch of science.

§ 42. This examination is for a full inquiry into all sciences, belonging to the profession of the candidate, and the requisitions are different for the various classes of medical men.

§ 48. If the candidate has passed likewise through this examination, he is entitled to a license, according to the degree of examination which he underwent.

1. If the candidate is licensed as a *medico-surgeon*, he is entitled to exercise the medical profession in its whole extent, and if he has eminently distinguished himself in his surgical examination, instead of the common title of this class, which is *physician and surgeon*, he gets the honorary title of *operateur*, or *physician and operateur*.

2. If the candidate is licensed as a *physician* only, he is entitled to exercise but the medical profession for internal cures. Both of these medical men must be graduated.

3. If the candidate is licensed as a *surgeon of the first degree*, he is entitled to perform all kinds of surgical operations, but cannot attend patients for internal cures. He only has the liberty to prescribe for internal use, if in a particular case no physician can be had at the moment.

4. The *pharmaceutists* only, who are licensed with the *first degree*, have the right and privilege of dispensing medicine, and nobody else.

§ 49. II. THE MEDICAL COMMITTEES IN THE PROVINCES.

They have to examine:

1. The surgeons of the second degree, who are to be licensed only for small operations, viz. leeching, bleeding, cupping, &c.

2. The accoucheurs.

3. The apothecaries of the second degree, who are to be licensed only as first assistants in the shops of the apothecaries of the first degree.

4. The dentists.

III. THE PARTICULARLY APPOINTED COMMITTEES.

Their business is to examine the veterinaries, oculists and midwives.

It gives us pleasure to state that the "New York State Medical Society," at their annual meeting in February, 1828, have taken up the subjects considered by the "Northampton Medical Convention," and have recommended a National Medical Convention, to meet in Philadelphia on the first Tuesday in May next; we trust they will be seconded by all the Medical Societies and Institutions in the Union.

We would respectfully suggest, that the time for the proposed meeting is too short, to afford an opportunity for Medical Societies generally to send Delegates, and therefore that it would be advisable, if possible, to extend the time, in order that all might be enabled to come into the measure. However, as it must have a commencement, if the meeting takes place, before an adjournment a proper time might be appointed, and we doubt not, that a subject so pregnant with importance to our profession, would be cordially seconded by all and every Society and School in the United States.

We before published an abstract of the Proceedings of the Northampton Medical Convention, we offer no apology for now publishing them entire, also some selections from the Transactions of the New York Medical Society. These, together with the interesting paper of Dr. Leo-Wolf, published in the present number, and the proceedings of the Societies of South Carolina and Georgia, published in a former number, as they have considerable bearing on the subject, cannot fail to be perused with pleasure by every physician who has the welfare and dignity of his profession at heart.—EDITORS.

Proceedings of a Convention of Medical Delegates, held at Northampton, in the State of Massachusetts, on the twentieth day of June, 1827, and continued by adjournment on the following day, in compliance with an invitation from the Medical Society of Vermont, addressed to the Medical Societies and Institutions in the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York.

The meeting of the Delegates was held at the Court-house in Northampton, and was composed of the following gentlemen, viz.

ARIEL MANN, M. D. from the Medical Society of Maine.

JOHN D. WELLS, M. D. from the Medical Institution of Bowdoin College.

MATTHIAS SPALDING, M. D. from the Medical Society of New Hampshire.

REUBEN D. MUSSEY, M. D. from the Medical Institution of Dartmouth College.

JAMES P. CHAPLIN, M. D. from the Massachusetts Medical Society.

JAMES JACKSON, M. D. from the Medical Institution of Harvard University.

HENRY H. CHILDS, M. D. from the Berkshire Medical Institution.

STEPHEN W. WILLIAMS, M. D. from the Berkshire Medical Institution.

USHER PARSONS, M. D. from the Medical Institution of Brown College.

SAMUEL B. WOODWARD, M. D. from the Connecticut Medical Society.

GEORGE SUMNER, M. D. from the Connecticut Medical Society.

The Convention was organized by the choice of a President and Secretary. Dr. Jackson was elected President, and Dr. Mussey, Secretary.

A letter was received at the opening of the Convention from Joseph A. Gallup, M. D. President of the Vermont Medical Society, stating the reasons why a delegate had not been appointed by that Society,* expressing the strong interest which its members continue to take in the objects of the Convention, and containing important observations on the various subjects which had been suggested in the first instance by the Vermont Medical Society. It was ordered that this letter be laid on the table, and that it be referred to and its various observations considered, when the subjects to which they related should be brought under discussion.

---

* The State Societies of Vermont and Rhode Island were not represented, because meetings of those Societies did not take place till after the meeting of the Convention was decided on.

After discussing the various subjects which had been suggested by the Vermont Medical Society, and such others as were proposed by the members of the Convention, the regulations which follow were adopted unanimously, and it was directed that they be communicated as the result of the proceedings of this Convention to the several Societies and Institutions in the States of Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, and New York; and that they be recommended to the same to be ratified by each of them respectively.

Before mentioning the regulations presented to the consideration of their constituents, the Convention deem it proper to state respectfully the general objects they have had in view, the methods by which it has appeared to them those objects might be best attained, and an explanation of the motives for some of the particular provisions contained in the said regulations.

Although there is reason rather for congratulation than reproach, or regret, in reviewing the progress of medical science and the improvements in medical education among us, yet from this very cause we are enabled to estimate more highly the importance of promoting that progress and those improvements constantly and steadily. The state of society is such, that whatever profession is stationary must be relatively retrograde. This state of society may not justify us in demanding every thing which would be desirable in the education of young men destined for our profession, but it will fully justify constant efforts for advancing the qualifications to be required of candidates for that profession. It is in this way we are to discharge the great debt we owe to the community.

It is important in the first place the preliminary education of medical pupils be more perfect than it has been in many instances. The advantages to such pupils of a proper literary education, and of an acquaintance with the elements of the physical sciences, are two-fold; first the mind is disciplined, so that the study of medicine can be pursued with increased power and profit; and second, the significant terms of science and art, and the references to the principles of the physical sciences, constantly encountered in medical works, are the more readily apprehended.

In proportion as the preliminary education has been more perfect, less time will be required for the studies which are strictly professional. To adjust in an exact proportion, the time requisite for pupils of different literary attainments would not be possible. In general, it may be said, that it is to be wished that every medical student should have had the advantage of a College education; but, where these advantages have not been enjoyed, it would seem proper that some specific acquirements should be designated, as the least which will qualify a pupil for engaging in the study of medicine and surgery. For those who are qualified for this study by a College education, three years is the shortest period which can suffice for its pursuit, before assuming the duties of the profession; and one year more seems the smallest addition which ought to be made to the term of study of those who have not enjoyed the same advantage. In correspondence with these views, the Convention have proposed some specific regulations.

It is believed that the regulations in respect to these objects may be carried into effect without difficulty, if the members of the various Societies and Institutions among us will firmly and constantly adhere to the principles and regulations which may be adopted, and if they will invariably withhold encouragement and support from those who may engage in the business of our profession without a compliance with the rules prescribed. It is in this way only that the members of the profession can designate to the public those young practitioners who are worthy of confidence; and the public will with certainty learn, in most instances, that their safety will be promoted by the encouragement of those only who are thus designated.

In fixing the periods at which the several regulations proposed shall go into operation, regard has been had to the following circumstances. The decision of the several Societies and Institutions to whom these proceedings

will be communicated, cannot be known before many months have elapsed; and if that decision be favourable, so that these regulations shall be adopted, a sufficient period should be allowed for their publication, before they shall be made to operate on those who will be the subjects of them.

It would be very gratifying to the members of this Convention, to believe that the measures proposed by them will be satisfactory to the several Societies and Institutions to whom these measures will be submitted. But they ought to be aware that their best endeavours may not have sufficed to produce the best results; and that, especially in cases where questions of expediency arise, there must always be great room for an honest difference of opinion. It is proper, therefore, that they should provide the means for further attempts to pursue the important objects for which they were appointed, in case the regulations here proposed should not be ratified by the majority of the Medical Societies and Institutions in the States of New England and that of New York. For this purpose, among others, they have constituted a Central Committee, of which the members are so located as that communications may be easily made to and from them; and they have given to this Committee the power to call a new Convention, similar to that now existing, if the same should be expedient.

It would also have been highly gratifying if this Convention could have been composed of delegates from all the States in the Union. But the blessings of our extended territory are not without inconveniences. It would seem nearly impossible that persons from such distances should be brought together with any convenience, and continue in session long enough to consider all the local customs and circumstances which ought to influence the regulations to be adopted in such a case; nor would it be easy in any way to reconcile all the different habits and practices of the people of such distant territories as those which are occupied by our nation. Meanwhile we doubt not that the zeal in the cause of medical education is as great in the other States of the Union, as in those which we represent. The Medical Institution of Charleston, S. C. has very honourably manifested their desire to elevate the profession in the only proper way, by making it more learned and more useful. Unquestionably the same spirit exists elsewhere. We have therefore directed our Central Committee to communicate the proceedings of this Convention to the Medical Societies and Institutions in all the States; and we entertain a hope, that by conventions in the different sections of the United States or otherwise, the other States may adopt measures the same as, or similar to, those here proposed.

In every case where another State does adopt such measures, it would seem proper that the same respect should be paid to the licenses and diplomas from such a State, as are proposed in regard to those of this Association.

The following are the regulations proposed for the adoption of the several Medical Societies and Institutions in the States before mentioned.

I. Those Societies and Institutions which adopt the regulations here proposed, shall constitute and be denominated *an Association of Medical Societies and Institutions;* and every Institution or Society belonging to the Association, shall constitute a member of the same.

II. Every candidate for a license to practice Medicine and Surgery, or for the degree of Doctor of Medicine, shall produce to the officers before whom he is to be examined, satisfactory evidence that he has received from some respectable College the degree of Bachelor of Arts; or, that previous to the commencement of his professional studies he had acquired a good English education, and such a knowledge of the Latin language, as to enable him to read with facility the Æneid of Virgil and the Select Orations of Cicero; and that he had also obtained a good acquaintance with the principles of Geometry and Natural Philosophy.

III. Every such candidate, if he has been graduated at some respectable College, shall have pursued the study of Medicine and Surgery three years

after his graduation; and if he has not been thus graduated, he shall have pursued the said study four years, with some physician or physicians licensed to practice Physic and Surgery under the laws of the state in which the parties reside.

IV. No student shall be allowed to absent himself from his studies more than six weeks in any one year of his professional pupilage; nor shall any student be admitted to an examination before he has arrived at the age of twenty-one years.

V. Every candidate for a *license* as above, shall have attended, during the period of his professional pupilage, one full course of Lectures at some incorporated Institution on each of the following subjects, viz.

Anatomy and Physiology,	Materia Medica,
Surgery,	Chemistry, and
Theory and Practice of Physic,	Midwifery.

He, shall, upon examination, give satisfactory evidence of his attainments on each of the subjects above specified, before an authorized board of examiners, and shall before the same board, read and defend a dissertation on some medical subject.

VI. Every candidate for the degree of Doctor of Medicine, shall have attended, during the period of his medical pupilage, two full courses of Lectures on each of the subjects enumerated above, at some incorporated Institution. He shall sustain before an authorized tribunal, a satisfactory examination on the several subjects which have been specified in the fifth regulation, and also on Botany and Medical Jurisprudence. Before the same tribunal, he shall publicly read and defend a dissertation on some medical subject.

VII. Every student applying for examination, whether for a license or a degree, shall present satisfactory evidence of his good moral character, and a certificate from his instructor or instructors, of his having pursued his medical studies the requisite period of time. He shall also present certificates of his having attended the requisite courses of Lectures, from the Professors delivering the same.

VIII. The regulation which relates to the preliminary qualifications of medical students, shall not be coercive upon such as *commence* their professional studies anterior to the 4th of July, 1829; and those which relate to Lectures and medical attainments, shall not be applicable to students applying for examination anterior to the same period.

IX. Every Society and Institution, which shall have adopted these regulations, shall appoint a tribunal or tribunals under the name of censors, or such other name as they may deem proper respectively.

X. When a Licentiate or Doctor of Medicine removes from one state belonging to this Association to another state also belonging to this Association, he shall be admitted to all the privileges of a Licentiate or Doctor of Medicine as the case may be, in the state to which he removes, provided that he lays his credentials before the tribunal above described, and such tribunal shall thereupon certify that said credentials are satisfactory. Nor shall any fee be demanded by the tribunal to whose examination said credentials may be submitted.

XI. In case any Medical Society or Institution, not originally belonging to this Association, shall accede to its regulations, the same shall thereupon become a member of this Association.

XII. If any member of this Association shall think there is cause of complaint against any other member on account of neglect or nonconformity with any of the regulations mutually adopted, the following course shall be pursued:—

1. The plaintiff in such a case shall respectfully but distinctly state its complaint to the party, who may be the defendant in the case; and if satisfactory explanations are made the case will then terminate.

2. If satisfactory explanations be not made in the case, then the plaintiff shall make complaint to the other members of this Association, and shall point out the remedy or compensation demanded; transmitting a copy of the communication to the defendant; of which satisfactory evidence shall be furnished to the other members of the Association.

3. On the representation so made, and after giving due opportunity for a reply from the defendant, each member of this Association shall, as soon as may be, express a decided opinion on the case in controversy, and shall communicate the same to each of the parties.

4. As soon as the opinions of the major part of the members of this Association are declared in favour of either party in the controversy, the case shall be regarded as decided, and the parties shall conform to the same.

5. If either party neglect or refuse within a reasonable time to conform to the decision so made, said party shall be regarded as losing, and shall thereupon lose all its rights as a member of this Association.

Resolved, That this Convention will appoint a committee of three, to be called a Central Committee, whose duties and powers shall be as follows, viz.

1. They shall, as soon as may be, cause to be printed 5000 copies of the transactions of this Convention.

2. They shall send copies of the same to each of the State Medical Societies and Institutions in the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York.

3. They shall accompany the copies so sent by a request that the Society or Institution to whom the same is sent will, as soon as may be, decide on the question of ratifying the doings of and adopting the regulations proposed by this Convention, and make the decision known to the said Committee.

4. As soon as the decisions of the several Societies and Institutions are communicated to this committee, or if they see proper, as soon as the decisions of the major part of the same are so communicated, the major part having decided either for or against the adoption of the regulations, the Central Committee shall make said decisions known to all the parties interested, and shall declare that the regulations shall forthwith be considered as established, in respect to the parties so consenting to the same.

5. The Central Committee shall also communicate the transactions of this Convention to the Medical Societies and Institutions of the other states of the Union, besides those above enumerated, so far as known to them; and to any distinguished individuals of the medical profession in our country, whom they may think likely to take an interest in the cause of medical education.

6. The expenses incurred by the Central Committee shall be defrayed by the Medical Societies and Institutions interested in this Convention.

The Convention then appointed the following persons on this Committee, viz.;

James Jackson, of Boston;
James P. Chaplin, of Cambridge; and
John C. Warren, of Boston.

Resolved, That these proceedings be signed by all the members of the Convention.

A. Mann,
Matthias Spalding,
James P. Chaplin,
H. H. Childs,
Usher Parsons,
George Sumner.
John D. Wells,
R. D. Mussey,
James Jackson,
Stephen W. Williams,
Samuel B. Woodward,

Northampton, Massachusetts, June 21, 1827.

Selections from the Transactions of the State Medical Society of New York, at their Annual Meeting, February, 1828.

The committee to whom was referred a communication from the Medical Faculty of Bowdoin College, relative to a National Convention, for the purpose of recommending a more uniform system of medical education throughout the United States, respectfully report: That they have taken the subject into serious consideration, and fully concur with the Medical Faculty of Bowdoin College in believing, that a co-operation between the several Medical Schools and State Societies of our country, is not only desirable, but necessary, for establishing a uniform system of medical education.

It cannot have escaped the observation of the most superficial observer, that there is, in our own state, a vast inequality in the acquirements, not only general, but professional, of the different practitioners of medicine. Some are liberally educated in the arts and sciences, and intimately conversant with the several branches of medicine, whilst others are ignorant of the ordinary branches of a common education, and but imperfectly acquainted with the different departments of their own profession. Your committee are of opinion, that no man ought to be permitted to practice physic or surgery, unless he possess a good English education, a knowledge of the Latin language, and the elements of mathematics, and has attended at least one full course of lectures on the different branches of medicine.

Your committee would respectfully recommend the calling a National Convention, consisting of a delegate from each of the regular Medical Colleges and State Medical Societies, to meet at Philadelphia, on the first Tuesday of May next, for the purpose of suggesting, and recommending for adoption, so far as is consistent with the laws of the several states, a more uniform system of medical education than now prevails; and that the representative of this Society be instructed to assure the Convention of our cordial co-operation in any plan, tending to elevate the medical profession, and to benefit mankind.

All which is respectfully submitted.

JAMES M'NAUGHTON, Chairman.

On motion, *Resolved*, That the above report be accepted, and that Dr. T. Romeyn Beck be the delegate to said Convention on the part of this Society.

---

1. *General Regulations concerning the Practice of Physic and Surgery in this State.*

§ 1. The president of every county medical society shall give notice in writing, to every physician and surgeon, not already admitted into such society, within the county in which the society of which he is president is situated, requiring such physician or surgeon, within sixty days after the service of such notice, to apply for and receive, a certificate of admission, as a member of such society.

§ 2. The service of every such notice shall be made personally, on the physician or surgeon to whom it shall be directed: and if such physician or surgeon shall not, within the time specified in the notice, or within such further time, as may be allowed by the president, under the regulations of the society, apply for a certificate of membership in such society, his license shall be deemed forfeited, and he shall be subject thereafter, to all the provisions and penalties of the laws of this state, in relation to unlicensed physicians, until upon a special application, he shall be admitted a member of the medical society, in the county in which he shall reside.

§ 3. If there shall be preferred to any county medical society, specific charges against any member thereof, of gross ignorance or misconduct in his profession, or of immoral conduct or habits, a special meeting of the society to consider the charges shall be called, of which at least ten days previous

notice shall be given, in one or more of the newspapers printed in the county.

§ 4. If two thirds of the members present at such meeting shall be of opinion, that the charges preferred are well founded, the president of the society shall, without delay, deliver a certified copy of the charges and of the vote of the society thereon, to the district attorney of the county, and shall give notice of such delivery to the member accused, who from that time shall be suspended from the practice of physic and surgery, until the determination of such charges, in the manner herein after provided.

§ 5. The district attorney to whom the charges shall be delivered, shall serve a copy thereof without delay, on the member accused, and at the same time shall give him notice, of the time and place at which the judges of the court of common pleas of the county will meet, for the purpose of hearing and determining the same: such notice shall be served at least fourteen days before the time of hearing appointed.

§ 6. The district attorney shall continue the prosecution of the charges, and shall issue process to compel the attendance of such witnesses, as the president of the society and the member accused, shall severally require.

§ 7. The judges of the county court, at the time and place of hearing appointed, or at such other time and place as they shall fix, shall proceed to hear and determine the charges, and shall examine, on oath, the witnesses produced: if they, or a majority of them, shall be satisfied, from the evidence, that the charges are true, they shall make an order, which shall be valid in law, expelling the member accused from the society, and declaring him for ever thereafter incapable of practising physic and surgery, within this state, or suspending him from such practice, for a limited period: if they shall be of opinion, that the charges are not established, the suspension of the member accused shall cease, and he shall be restored to all his rights and privileges, as a practising physician and surgeon.

§ 8. No student shall be admitted to an examination by any medical society, until he shall have completed, with some physician and surgeon, duly authorized by law to practice his profession, the term of medical study, prescribed in the following sections of this title.

§ 9. The regular term of the study of medical science shall be four years, but a deduction from such term, in no case to exceed one year, shall be made in either of the following cases:

1. If the student, after the age of sixteen, shall have pursued any of the studies usual in the colleges of this state, the period, during which he shall have pursued such studies, shall be deducted.

2. If the student, after the age of sixteen, shall have attended a complete course of all the lectures delivered in an incorporated medical college in this state, or elsewhere, one year shall be deducted.

§ 10. The physician and surgeon with whom a student shall commence his studies, shall file a certificate with the president of the county medical society to which he belongs, certifying that such person has so commenced his studies; and the term of study shall be considered as commencing from the day on which such certificate is filed.

§ 11. If the term of study shall be intended to be for less than four years, upon either of the grounds mentioned in the ninth section of this title, the president with whom the certificate shall be filed, upon satisfactory proof that a deduction ought to be allowed, shall annex to such certificate, an order specifying the period, not exceeding one year, which according to the proof exhibited to him, ought to be deducted from the term of four years, and directing that the term of study of the student shall be for the period that shall remain.

§ 12. No person shall receive from the regents of the university a diploma, conferring the degree of doctor of medicine, unless he shall have pursued the

study of medical science for at least three years, after the age of sixteen, with some physician and surgeon, duly authorized by law, to practice his profession, and shall also, after the same age, have attended two complete courses of all the lectures delivered in an incorporated medical college, and have attended the last of such courses, in the college by which he shall be recommended for his degree.

§ 13. No student shall be admitted to an examination by any county medical society, except of the county in which he shall have pursued his medical studies for four months immediately preceding his examination; but if the student, during that period, shall have attended the lectures in either of the incorporated medical colleges of this state, he may be examined and licensed, either by the medical society of the county in which such college is situated, or by that of the county, in which he shall have resided, previous to such attendance.

§ 14. No person, who shall have been examined by the censors of any county medical society, as a candidate for the practice of physic and surgery, or either of them, and shall have been rejected on such examination, shall be admitted to an examination, before the censors of any other county medical society; but such person may appeal, from the decision of the censors by whom he shall have been examined, to the medical society of the state.

§ 15. No person, who, either upon an original examination or upon an appeal, shall have been rejected by the censors of the state medical society, shall thereafter be admitted to an examination, before the censors of any county medical society.

§ 16. No person shall practice physic or surgery, unless he shall have received a license or diploma for that purpose, from one of the incorporated medical societies in this state, or the degree of doctor of medicine from the regents of the university; or shall have been duly authorized to practice by the laws of some other state or country, and have a diploma from some incorporated college of medicine, or legally incorporated medical society, in such state or country.

§ 17. No person coming from another state or country, shall practice physic or surgery in this state, until he shall have filed a copy of his diploma, with the clerk of the county where he resides, and until he shall have exhibited to the medical society of that county, satisfactory evidence that he has regularly studied physic and surgery, according to the requisitions of the ninth section of this title.

§ 18. No diploma, granted by any authority out of this state, to an individual who shall have pursued his studies in any medical school within this state, not incorporated and organized under its laws, shall confer on such individual, the right of practising physic or surgery within this state.

§ 19. Every person licensed to practice physic or surgery, or both, shall deposit a copy of such license with the clerk of the county where he resides, who shall file the same in his office; and until such license is so deposited, such person shall be liable to all the penalties provided by law, in the same manner as if he had no license.

§ 20. No person under the age of twenty-one years shall be entitled to practice physic or sugery in this state.

§ 21. The degree of doctor of medicine conferred by any college in this state, shall not be a license to practice physic or surgery; nor shall any college have, or institute, a medical faculty, to teach the science of medicine, in any other place than where the charter locates the college.

§ 22. Every person, not authorized by law, who, for any fee or reward, shall practice physic or surgery within this state, shall be incapable of recovering, by suit, any debt arising from such practice, and shall be deemed guilty of a misdemeanor, punishable by fine or imprisonment, or both, in the discretion of the court by which he shall be convicted.

2. *Bye-Laws of the Medical Society of the State of New York.—Revised and adopted, Feb.* 3, 1825.

Whereas the Medical Society of the state of New York, has been duly incorporated, pursuant to the statute of the 4th of April, 1806: And whereas among other grants and privileges, the said Medical Society are invested with powers to make such bye-laws and regulations, as they, or a majority of the members at their annual meeting, shall deem fit and proper: And whereas, by the said statute, the bye-laws and regulations of the respective county Medical Societies are directed not to be repugnant to the bye-laws and regulations of the Medical Society of the State: Therefore,

I. *Be it ordained by the Medical Society of the State of New York*, That the anniversary meeting of the society shall be held on the first Tuesday in February, in every year; and all other meetings may be held at such time and place as may be determined by a majority of the society convened at any legal meeting, and that fifteen members shall constitute a board to transact the business of the society.

II. *And be it further ordained*, by the authority aforesaid, that every member shall observe order and decorum at all the meetings of the society, and shall pay proper respect to their fellow members and to the president and other officers. And all the members shall take their places, whenever the president or presiding officer shall declare the society constituted; and whenever a member shall speak, he shall stand up and address the chair; and whenever any two or more members offer to speak at the same time, the president, or presiding officer, shall determine the priority in speaking.

III. *And be it further ordained*, by the authority aforesaid, that the president shall preside at the meetings, and shall preserve order and decorum in the same; he shall perform the duties of his office as now are, or hereafter may be directed by the laws of the state, or the ordinances, by-laws and regulations of the society; he shall take the sense of the society on any motion made and seconded; he shall have a casting vote in all transactions where the votes of the members are equally divided; and shall deliver the decisions of the society.

IV. *And be it further ordained*, by the authority aforesaid, that the president of the society shall at the annual meeting, and at the end of each year after his election to office, deliver to the society a dissertation on some appropriate subject; and in case of default in delivering the same, he shall forfeit and pay to the society the sum of twenty-five dollars. *Provided always*, that if such president shall duly cause to be presented to the society a copy of his anniversary dissertation, he may, if the society deem proper, be excused from delivering the same; but he cannot be exonerated from the fine of twenty-five dollars for not composing and presenting such dissertation, and a copy of such dissertation, so presented, shall be read to the society by the vice-president or president pro tempore.

V. *And be it further ordained*, by the authority aforesaid, that the treasurer shall keep and be accountable for all monies placed in his hands belonging to the society, and shall thereout pay such warrants as may be drawn by the president or vice-president for the use of the society; and shall present at each anniversary meeting of this society, a minute report of the state of the treasury; and the treasurer shall moreover perform all the duties prescribed by law, and the ordinances, by-laws and resolutions of this society.

VI. *And be it further ordained*, by the authority aforesaid, that during the recess of this society it shall be the duty of the censors on application of any candidate or candidates for examination, to meet together for that purpose; that each censor so met shall receive from such candidate or candidates, a sum not exceeding four dollars per day during the whole time occupied in convening, and examining such candidate or candidates.

VII. *And be it further ordained*, by the authority aforesaid, that all stu-

dents of medicine who shall have presented to a quorum of the censors of this society, satisfactory testimony, that they have studied physic and surgery as is directed by the statute for incorporating this society, and who shall upon due examination by the censors, be found duly qualified to practice physic or surgery, or both, and have their said qualifications certified in such manner as is directed by law, shall, before they receive the requisite diploma from the president, sign a declaration in the words following, viz:

"I, A. B. do solemnly declare, that I will honestly, virtuously and chastely conduct myself in the practice of physic and surgery, with the privileges of exercising which profession I am now to be invested; and that I will with fidelity and honour do every thing in my power for the benefit of the sick committed to my charge."

Which said declaration, so signed by every candidate to practice physic and surgery, shall be filed by the secretary in the archives of the society.

VIII. *And be it further ordained*, That the president and secretary be, and they are hereby authorised to grant to every such candidate qualified to practice physic and surgery agreeably to law, in the name and under the seal of the society, a diploma in the words following, viz:

Omnibus ad quos hæc literæ pervenerent:

S.

Nos, Societatis Medicæ Reipublicæ Novi Eboraci Præses, Cæterique Socii, hoc scripto testatum volumus (inserting the name and country of the candidate) in artis medicæ et chirurgicæ studium, sub viris in medicina peritis, tempus præstitutum incubuisse, et in hisce studiis progressus, luculento testimonio, nobis probâsse, et commendâsse; quocirca ex auctoritate nobis commissa ad artes medendi et chirurgiæ in hac republicâ excolendas, cum omnibus privilegiis, quæ ad has artes pertinent, potestatem concedimus. Cujus rei quò major esset fides, hocce diploma, sigillo nostro appenso, donavimus.—Datum (the place, year and day to be inserted.)

IX. *And be it further ordained*, That if any candidate should request a diploma in English, it shall be in the following form, viz:

"To all to whom these presents shall come, or may in any wise concern—The president and members of the medical society of the state of New York, send greeting: Whereas (name and country of the candidate) hath exhibited unto us satisfactory testimony that he hath studied physic and surgery, for the term and in the manner directed by law; and hath also, upon examination by our censors, given sufficient proofs of his proficiency in the healing art, and of his moral character. Wherefore, by virtue of the powers vested in us by law, we do grant unto the said (name of the candidate) the privilege of practising physic and surgery in this state, together with all the rights and immunities which usually appertain to physicians and surgeons. In witness whereof, we have granted this diploma, sealed with our seal, and testified by our president and secretary, at (place, day and year.)

X. *And be it further ordained*, by the authority aforesaid, that all students who may hereafter be licensed by any county medical society in this state, shall be required to sign a declaration corresponding to that set forth in the preceding ordinance; and it shall be the duty of each president of the medical society of every county, to exact and demand the same, and to file such declaration in the archives of the society granting such diploma.

XI. *And it is also further ordained*, That the diploma to be hereafter granted, to every person to practice physic and surgery, by any county medical society in this state, shall correspond with the diploma in the preceding ordinance, adapting the same to the name of every such county.

XII. *And be it further ordained*, by the authority aforesaid, that it shall be the duty of every member of this society, to present at every anniversary meeting, a copy of the bye-laws of the county society for which he is the delegate, and to furnish this society with an abridged historical account of the proceedings of every such county society.

XIII. *And be it further ordained*, by the authority aforesaid, that each and every member shall present to this society, all proper information respecting the geology and topography of the county in which he resides, together with an historical account of the diseases which prevail at any season of the year; and shall communicate all such information in his power which may contribute to the public good, or advance the knowledge of the healing art.

XIV. *And be it further ordained*, by the authority aforesaid, that the said society shall appoint a committee of not less than five nor more than seven members, as a committee of correspondence, whose duty it shall be, in their joint or individual capacity, to correspond with literary societies, and men eminent for knowledge, and they shall present such communications as they may deem proper to the society.

XV. *And be it further ordained*, by the authority aforesaid, that the president or vice-president of the said society, shall, together with the secretary and three censors, form a comitia minora to carry into execution the laws and ordinances of the society during its adjournment.

And whereas it is inconsistent with the dignity of the medical profession, for physicians and surgeons, in their corporate capacities, to arrange and fix professional charges:—

XVI. *Be it therefore ordained*, That any member of this society, who shall hereafter be guilty of promoting, favouring, or encouraging the members of any medical society, in their corporate capacity, to form, support and fix medical charges, and who shall be convicted thereof before the said society, at any anniversary meeting, to the satisfaction of a majority of the members present, shall be expelled from the society, and shall for ever after be debarred from being received as a member thereof.

XVII. *And be it further ordained*, That no corporate county medical society shall fix any medical charges, and such proceedings are hereby declared to be discountenanced by this society, and to be null and void, and of no effect.

XVIII. *And be it further ordained*, by the authority aforesaid, that all ex-members of this society shall be honorary members thereof, and that the governor and lieutenant governor of the state, the chancellor, and the judges of the supreme court, for the time being, shall be ex-officio members of this society; and all persons of distinguished literary talents, who may be proposed as honorary members of this society, must be nominated at the anniversary meeting, and shall not be elected before the next succeeding anniversary meeting, which shall be done by ballot. But there shall not be more than two honorary members elected in any one year.

XIX. *And be it further ordained*, That all honorary members shall have all the power of ordinary members, except they shall not vote on any question, nor be eligible to any office in the society, and a majority of votes shall admit an honorary member.

XX. *And be it further ordained*, by the authority aforesaid, that any county medical society who shall neglect to perform all such acts, as may be required to be done by them, by the law incorporating medical societies, or any other law of the state relative to the science of medicine, or who shall do any acts which may be considered derogatory to the honour of the medical profession, or who shall oppose or neglect to comply with the bye-laws of this society shall be admonished touching any such proceedings; and if it is deemed necessary for the public good, that, from the improper conduct of any such county medical society, their corporate rights should for a time be suspended, then and in that case it should be lawful and just for this society to make application to the honourable the legislature for such purposes.

XXI. *And be it further ordained*, That a librarian shall be annually elected in the same manner as the other officers, whose duty it shall be to take charge of all books and pamphlets belonging to the society. He shall annually report the state of the library.

XXII. *And be it further ordained*, That the system of medical ethics re-

ported and adopted Feb. 5, 1823, be considered as authoritative to govern the profession in the state of New York.

XXIII. No article of the bye-laws as now adopted, shall be altered or amended, without the consent of two-thirds of the members present at a regular meeting.

Medical Police.

XXIV. *And be it further ordained*, by the authority aforesaid, that any member of the said society who may be convicted of any serious offence against the laws of this state, or of the United States, or who may be guilty of gross immorality, or who shall have improper pretensions to any specific or nostrum, or who shall be repeatedly guilty of improper conduct in the duties of his profession or his behaviour in this society, may be expelled at any anniversary meeting of the society, upon a vote of two-thirds of the members present.

XXV. *And be it further ordained*, by the authority aforesaid, that when any accusation is lodged with the president, vice-president or secretary, of a nature, which may subject a member of this society, to expulsion, according to the above ordinances, such accusation or accusations shall be transmitted to the member accused, and a day shall be fixed at the anniversary meeting, for his trial, which shall be fair and impartial, and the verdict of the members on such trial shall be delivered at the first meeting of the society after the trial.

4. *Resolutions, requesting Contributions to the Medical Prize Fund.*
[Reprinted.]

"Whereas it is desirable that this Society should possess a permanent fund, for the purpose of extending its usefulness; and whereas the income of this Society, by which its expenses are paid, is wholly precarious and uncertain, being derived entirely from the fees for diplomas to licentiates, therefore,

"*Resolved*, That it be recommended to the different County Medical Societies in this state, to appropriate a sum of not less than two nor more than five dollars in each year, for the purpose of forming a permanent fund for the State Medical Society, to be expended exclusively for the promotion of medical science.

"*Resolved*, That the said money so appropriated, be transmitted to the Secretary of this Society, in each year, at or before the anniversary meeting.

"*Resolved*, That the preceding preamble and resolutions be taken by the delegates, and by them laid before their respective societies at their first meeting; that the Secretary be directed to transmit a copy to each of the County Medical Societies not represented, and that they be requested to signify their assent or refusal to the same."

6. *Regulations as to Prize Dissertations.*

1. A committee of five shall be appointed at each annual meeting, to report prize questions to be laid before the Society at the next annual meeting.

2. Public notice of the subjects offered, shall be given by the Secretary, immediately after the close of the annual session of the Society.

3. The dissertations offered for the prizes to be forwarded to Albany, on or before the 1st of December. That they be accompanied with a sealed paper, containing the name of the author, and that this sealed paper, as well as the dissertation, be endorsed with the same motto, in order that the name of the successful author alone may be ascertained.

4. That a standing committee be appointed annually, to examine and report on the dissertations that may be presented; the committee to report as early as possible during the sessions.

5. In reporting the dissertations to the Society which may be deemed worthy of prizes, the committee are to be governed not by the number of dissertations sent in, but by their intrinsic merits. A prize may, therefore very properly be adjudged to a dissertation, although it be the only one on the subject. The only safe principle by which the committee can be regulated is, that the publication of the dissertation would do credit to the Society.

6. The author may publish it in a pamphlet form, he furnishing sixty copies; or, the Society will direct its publication in some medical journal of this state, the editors of said journal agreeing to furnish the said sixty copies.

Transactions of 1826.

7. The Treasurer shall make no payment to the successful candidates for premiums, unless they have fully complied with the regulations of the Society, adopted in 1826.

8. Those counties that shall pay annually the sum of two dollars into the State Medical Society, shall be entitled to a copy of the prize dissertations, and those that pay five dollars, shall be entitled to two copies.

Transactions of 1827.

The committee to whom was referred so much of the instructions of the Medical Society of the county of New York, as relates to the lately revised act of the legislature of this state, regulating the practice of physic and surgery, which is in the words following, to wit:

"*Resolved*, That the delegate be instructed on the part of this Society, to "congratulate the Medical Society of the state on the passage of the revised "act, relative to the practice of physic and surgery; inasmuch as the same is, "for the most part, in accordance with their wishes, as from time to time ex- "pressed by memorial to the honourable the Legislature.

"*Resolved*, That he be directed to express to the Medical Society of the "state, the entire concurrence of this Society in all the provisions of the act, "so far as they relate to the medical license, and the instruction of pupils in "medical science, previous to their admission to the practice of physic and "surgery.

"*Resolved*, That he be further directed to express to the Medical Society of "this state, the wish of this Society, that they would take the subject of the "law into consideration, and if they approve the same, that they will publicly "express their approbation:"

Respectfully report that they have given the subject all the attention, which the time usually allotted to the committees of the Society, has allowed. Fortunately, the duty of your committee is as plain as it is important; they, therefore, feel no hesitancy in meeting the wishes of the Society on the shortest notice, and they are happy to have the opportunity to record their settled conviction, that the date of the lately revised act will mark an æra in the history of medicine of this state, to which those of us who may live to the most advanced age, may carry back their recollections in times to come, with the mixed feeling of pride, pleasure, and consciousness of right, known only to those who have laboured for years with faithfulness, intelligence and zeal in the cause of humanity, and whose efforts have finally been crowned with success. That act commends itself to the judgment of every intelligent member of the profession, inasmuch as it has stricken at the root of all the quackery and imposture which have heretofore been cherished by the prejudices of ignorance, or supported against the better sense of the community by the petty and sordid calculations of personal interest. The repeal of the provisoes of the 20th section of the act of 1813, which operated as bounties to stupidity, by granting patents of immunity to the most abject ignorance, not only claims our gratitude as physicians, but has laid the public under obligations to the legislature of 1827, which cannot be properly estimated in all their extent, until experience shall cease to be the test of the benefits of public law. Your committee, therefore, recommend that this Society do most

cordially reciprocate the sentiments contained in the first of the resolutions, which are the basis of this report. The second resolution, expressive of the entire concurrence of the Medical Society of the county of New York, in all those parts of the late law providing for the medical instruction of the members of our profession, in the opinion of your committee, is in perfect accordance with the views of this Society on this all important subject, as they have been frequently expressed, both by resolution and memorial; and comment upon it, therefore, is considered unnecessary. The provisions are such as cannot fail to elevate the character of the medical profession, and place it, within a short period, in a condition to claim the unqualified support, and challenge the respect, of every individual in the community, who would maintain a character for intelligence and patriotism. The third resolution, in the opinion of your committee, is urged upon this Society by every motive which either duty or expediency can suggest; for it is unreasonable to suppose, that any law of any kind, which so materially changes the police of a large profession as this does, should not meet with some opposition from ignorance, avarice, or prejudice. Your committee, therefore, recommend that the Medical Society of the state, previous to adjournment, direct the publication of its unqualified assent to all the provisions of the law.

All which is respectfully submitted.

JAMES R. MANLEY, Chairman.

On motion, *Resolved*, That the above report be accepted.

Dr. Heermans, from the committee to whom was referred the communication from the Medical Societies of the counties of New York, Yates and Tompkins, on the subject of intemperance, reported the following preamble and resolutions, which, after being considered and amended, were adopted by the Society:

The Medical Society of the state of New York, taking into consideration the duties they owe to the public, as members of a profession, to whose care is committed the health of its citizens, recognise with deep solicitude one of the most alarming causes of disease, that exists in human society, to wit, intemperance in the use of ardent spirits.

And whereas it is an evil that is growing to an alarming extent among all classes of society; and, from the cheapness and facility of procuring distilled spirits, has become the common beverage of almost every class of the community: And whereas, there is reason to believe, that the habitual use of ardent spirits is often the consequence of an opinion that their use contributes to the health of the body, and becomes necessary to sustain it under great fatigue and exhaustion; that it is a preventive of disease from contagious and miasmatic causes, and that it is necessary as a medicine in diseases, accompanied with debility, to restore tone and vigour to the system: And whereas it is a duty peculiarly belonging to the medical profession to oppose and correct these insidious errors,—

Therefore, *Resolved*, That in the opinion of this Society, the habitual use of ardent spirits is not a source of strength and vigour, but that it is generally productive of weakness and disease.

Resolved, That in the opinion of this Society, ardent spirits are not a preventive of disease under any circumstances, but that more frequently their use predisposes the body to the reception of complaints of an aggravated form.

Resolved, That this Society will discourage the intemperate use of ardent spirits, as far as their example and influence will extend.

We select the following pertinent observations from the Carolina Journal of Medicine, edited by Thos. Y. Symons.—Eds. Rec.

"The multiplicity of institutions in a country, are not always a just criterion of the progress of science in that country; and, although we most heartily rejoice in the rapid advances which are making in all branches of knowledge throughout our country, we cannot but regret to say, that institutions springing up so close to each other, as happens in the Northern States, will forward not one iota medicine or medical science, but injure the success of each other.

What, for instance, is the necessity of having two medical schools in the city of Philadelphia, or in the state of New York? Surely one will answer every purpose.

When institutions become multiplied, the younger institutions, in order that they may attract students, and become popular, give greater facilities for attaining medical degrees; and as a general rule, we find those, who cannot obtain degrees from old established medical schools, become, quickly, candidates for medical degrees in those but lately established. This practice of cheapening degrees, that the institutions may become popular, is doing an injustice to the citizens at large.

It is not our intention to make invidious or personal remarks; but we cannot resist mentioning what we consider evils, in the plans adopted by some of our medical schools, assuming to ourselves the privilege of declaring, "Nothing extenuate or set down aught in malice."

In proportion as medical schools multiply, it will be admitted, so should the advantages which they present, increase, and every means should be adopted, which would secure to the citizens of these United States, well instructed and scientific medical men. The mere attainment of sufficient knowledge to cure a fever, or sett or cut off a leg, is not enough. The elements of all the sciences should be studied thoroughly; and the medical man, when he graduates, should look as much to reputation, as subsistence, to the improvement of his country, as well as the improvement of his fortune. Judging from present appearances, we would say, that the medical aspect of our country, is highly promising. Still, there are some evils which there could be no harm in correcting, and, which now make our best universities inferior to the best in Europe. We will now briefly state the evils of which we complain, with our reasons.

I. The lectures should continue six months in place of four months. 1st. Because it gives time to the lecturer to discuss every topic fully, and the student to have them well impressed upon his mind. And, 2d. Eight months out of twelve, is too much time to be unoccupied in medical studies; and the student is apt to forget much of what he learnt of the profession.

II. The student should be required to stay three years, and not be compelled to take out every professor's ticket each year, but be allowed to take as many as he may think proper; so the ticket of each professor be taken once, during the several years requisite. The reasons for this are extremely obvious.

1st. Three years is little enough time for any one, however great his talents, and however assiduous and industrious he may be in the prosecution of his studies, to obtain a medical degree; for, no profession, if properly studied, requires greater labour and research than, and involves such a number facts as, the medical profession; nor is there any profession so responsible or important in its consequences. To hurry over it, therefore, and obtain the semblance instead of the reality, is not only wrong, but sinful. Nor can too much caution be used in granting medical degrees; for a man may be licensed and yet be nothing more than an empiric. Professors may say, it is no matter how long they have been studying, provided they stand a good examination. But examinations are miserable criteria of the acquirements

of an individual; and we remember having heard a distinguished professor once say, that as a general rule, the dullest and most unscientific answered the greater number of questions, although they were answered like a parrot.

2d. The plan of requiring a student to attend each session, six different professors, is absolutely unjust and absurd. What! can a student study correctly—*Anatomy, Surgery, Practice and Institutes of Medicine, Midwifery, Chemistry, Materia Medica,* and *dissect and attend the Hospitals?* I ask, if it is possible for a student to attend to all these different and difficult branches of study, and other duties, in one session: what distinct idea, in the name of common sense, can he have of either? The various subjects which he hears discussed in one day, form a heterogeneous medley in his brain, producing absolute chaos. He has no distinct idea of any particular branch, and the different subjects which have been presented to him. Let us now trace the process. A student attends the lecture on Anatomy; he listens to what the professor is telling him. Before, however, he can digest what he has heard, next comes the chemical professor; and in discussing his branch, entirely effaces from the mind of the student, all recollection of what the professor of anatomy had said, and so on with all the different branches; and at the termination of his day's labour, he is as wise as when he commenced, and has, at last, to resort to some elementary work as his sole guide and instruction. There is an old saying, (and old sayings, however homely, are sometimes worth remembering) that too much work makes Jack a dull boy; and we know of no better method of producing dullness, than the process we have just mentioned.

What is the consequence? Students, who wish to learn their profession, take out the tickets, but only attend a certain number of the professors, because they know, that otherwise they will learn nothing; and in thus conscientiously performing a duty towards themselves, they are taxed with the purchase of tickets, of which they would, for that session, rather dispense with. It may be urged in defence of this plan, in young institutions, that it is the only means of support, as the number attending are too small for such a division; but this is no good excuse; still, for institutions like Philadelphia, where five hundred students attend, no such excuse can be offered; and we are very well satisfied, that from seven to eight thousand dollars, is a very high salary, for lecturing four months. We have mentioned these what we deem imperfections in some of our medical institutions, because from the zeal and ardour which is exhibited throughout our country in the attainment of medical knowledge, there can be no reason why our medical institutions should not be equal to any in the world; and it becomes every patriotic medical man, fairly to expose every thing, which has any tendency, to prevent this result.

The university of Philadelphia, from its long standing, and high reputation, ranks the first among all the medical institutions of the United States. The professors of that institution, receiving so much honour and profit as they do, owe a heavy debt to their country. Much is given them, and much is expected from them. They, therefore, must take no umbrage in our mentioning a practice which some of them have instituted, which we unhesitatingly declare to be derogatory to the dignity of professors, and which, if persevered in, will degrade that institution as much as it was elevated, under the fostering care and intellect of its earlier professors. The practice we allude to, is forming what are called private classes, disconnected with the college; for which a student has to pay a large sum of money to attend. We object to this procedure.

1st. Because a professor has enough to do to attend faithfully to his chair.

2d. His profits, from his chair, are as much as he should crave; and it is taking an advantage of his situation to create a monopoly; thereby keeping down young men of talent, who, by commencing with private instruction, will be enabled to fill with ability the professional chairs, whenever they become vacant.

3d. It opens the way to unfairness in the obtaining of a medical degree, and, at all events, acts as a compulsion upon young men, to go to the further expense of taking out these private tickets, that there might be a greater chance of obtaining a degree. Without extending our objections any further, we think we have abundantly shown the impropriety of such proceedings. This practice, we do not pretend to say, is confined to the Philadelphia university; but it was first commenced there, and it being so high in public estimation, should be the first to do away with any thing which can, in any degree, cast a stain upon the character of our medical institutions. For our part, we most sincerely wish, that this money-making practice, which puts science on the footing of trade, could be eradicated from all of our schools.

In thus writing freely our sentiments, we again delare ourselves free from all malice or bad feeling. Our motive has been pure—to open to public gaze, what we consider serious and grievous evils; and if, in thus acting, we should give offence, we must bear the brunt of our offending."

We regret exceedingly that the professors of this school are not alone in the abuses above alluded to, but we would fain give them *credit* for the *example.* We find that it has become quite fashionable for the professors in several of our schools, to adopt a similar course; and we honestly believe that we should have much better educated physicians, if a course so inconsistent with liberality, so injurious to the cause of science, and so degrading to its founders, was entirely abolished.—Eds. Am. Med. Rec.

Philadelphia Medical Society.—Officers for 1828.

President.—Philip Syng Physick, M. D.
Vice Presidents.—Joseph Parrish, M. D. Samuel Jackson, M. D.
Corresponding Secretaries.—John Bell, M. D.; B. H. Coates, M. D.
Orator.—Charles D. Meigs, M. D.
Treasurer.—D. F. Condie, M. D.
Librarian.—Alfred Drake, M. D.
Curators.—Alfred Drake, M. D. Thomas H. Ritchie, M. D.
Library Committee.—C. D. Meigs, M. D.; H. L. Hodge, M. D. R. Huston, M. D.

The following lectures were read before the Society, during the summer and winter sessions.

Dr. Jackson, on Debility.—Dr. Condie, on Acute Rheumatism.—Dr. Meigs, on some Diseases of the Spinal Marrow.—Dr. B. H. Coates, on the Pathology of some Diseases of the Brain.—Dr. Edward Jenner Coxe, on Acupuncturation.—Dr. Horner, on the Pathological Changes of the Gastro-Intestinal Mucous Membrane.—Dr. Harris, on Asphyxia from Drowning.—Dr. Bell, on Gaseous Poisons.—Dr. Brewster, Observations on the morbid affection from drinking cold water.—Dr. Hodge, on Irritation.—Dr. D. Theodore Coxe, on Baths.—Dr. B. H. Coates, a sketch of the extent and relation of Physiology.—Dr. Horner, on the Phenomena of Inflammation.—Dr. Hays, on the Pathology of the Tissues composing the Cornea.—Dr. Harris, on Poisoned Wounds.—Dr. Emerson, on the new doctrine of Syphilis, and the non-existence of a Syphilitic Virus.—Dr. Sharpless, on the use of Heat and Cold as Therapeutic agents.—Dr. Bond, on Respiration.—Dr. Condie, on Hæmoptysis.—Dr. Hopkinson, on the morbid Sympathies of the Brain and Stomach.—Dr. Parrish, on the evidence derived from Surgery to prove the existence of a Vis Medicatrix Naturæ.—Dr. Edward Jenner Coxe, on Cynanche Trachealis.—Dr. Rousseau, on the importance of Exercise to favour and preserve the healthy state of the body.

Dr. Joseph Clark, of Dublin, was elected an honorary member

The following Gentlemen were admitted as Junior Members during the past sessions.

Pennsylvania.—Edward Jenner Coxe, M. D. William C. Baum, M. D. James Ross Smith, M. D. William W. Gerhard, William Colquhoun, John Van Buskirk, John B. Dick, Joseph Togno, Henry D. Dietrick, Daniel J. Brunner, Richard J. K. Sims, Adam R. Stonch, Gideon G. Palmer, Joseph Hickman, Jeremiah F. X. M'Credy, Henry Lippincott, Geo. J. Janeway, Geo. Huhn, Charles H. Bessonetts, Samuel J. Hobson, Edward Hallowell, William Keith, Joseph Carson, John H. Jager, Robert Rogers, Hiram Corson, William Whelan.

Virginia.—James H. Gregory, Francis R. Gregory, H. Montgomery, Matthew Jefferson, L. G. Wynn, Walter R. Puckett, Thomas M. Boyle, Robert M. Dunbar, Richard B. Alexander, William R. Smith, Robert Carter Randolph, James R. Coleman, Watson Carr, Gaines S. Garth, William T. Maclin, James J. Barclay, John N. Sebrell.

New York.—Brian Burwell, M. D. Charles G. Fowler, G. S. Fowler.

New Jersey.—James S. Carpenter, Joseph Warrington.

Delaware.—Lewis Summerl, M. D. Thomas T. Dale, Henry Gibbons.

Maryland.—Charles W. Johnson, Burton Randall, John W. Anderson.

North Carolina.—Reading S. Long, Jesse Carter, Larkins G. Jones, James J. Vernon, Michael O'Reilly.

South Carolina.—Joachim R. Lanpy, M. D. John M. Raiford, Evans Amaker, R. W. Gibbs, Arthur Gibbes.

Georgia.—Paul Eve, Lester Humphreys, John A. Urquhart, Ed. R. Ware.

Rhode Island.—Samuel B. Toby.

District Columbia.—James Jones.

Ohio.—Leonard Hanna.

Tennessee.—Robert N. Strong.

Quebec, Canada.—William Blumheart, Renè Bedard.

Nova Scotia.—Edward Brown, *Halifax.*

West Indies.—Geo. Gray, *Jamaica;* Jos. Robinson, *St. Croix.*

From the Records of the Society,

JOHN R. W. DUNBAR, *Recording Sec.*

To the Editors of the American Medical Recorder.

GENTLEMEN,—Your note of the 24th inst. is received, in relation to our decision on the Dissertations on Typhus Fever, put into our hands for examination. We have carefully read the essays, and are of the opinion that the one bearing this motto, "Nullum ego cognosco remedium nisi quod tempestivo usu tale," is the best entitled to the prize; on breaking the seal we found the author to be STEPHEN BROWN, of New York. In making our decision we were in a great measure governed by the practical character of the papers, believing that the profession will derive much more advantage from essays of this nature than from long theoretical dissertations. One of the essays which came under our notice, bearing the motto, "Frequenter veritas interjacet duobus extremis," is well written, and does the author great credit; but for the reasons above expressed, we did not think it entitled to the premium. We are of the opinion it would make more than one hundred pages of your journal. We respectfully state, that we believe it would be desirable for the profession that all prize essays should be as practical as possible, and not to exceed more than 40 or 50 pages. The essay bearing the motto, "Opinionum," &c. was written in such an illegible hand that it was impossible to obtain a sufficient knowledge of the author's views, to form an opinion as to the merits of his production. We would strongly recommend correspondents to write in a fair hand.

ELIJAH GRIFFITHS, M. D.
HENRY BOND, M. D.
JOHN D. THOMAS, M. D.

Philadelphia, 28th March. 1828.

STATEMENT OF DEATHS,

With the diseases and ages, in the City and Liberties of Philadelphia, from the first January, 1827, to the first January, 1828.

NOTE.—Of the foregoing there were males of 20 years and upwards, 1152; 1026 under 20 years; 845 females of 20 years and upwards; 922 under 20 years.

There were 443 returns received at the Health Office of persons who died in the Alms-House of the city during the year; and 757 people of colour are included in the statement of interments.

Agreeably to returns made and collected from 127 practitioners of midwifery, there have been born in the City and Liberties, from the 1st of January, 1827, to the 1st of January, 1828, 3581 male, and 3452 female children; making the total number of births 7033; leaving a difference between the births and interments for the year, of 3088.

Deaths in each month of the within period.

	Adults.	Children.	Total.
January	176	137	313
February	138	149	287
March	156	149	305
April	130	145	275
May	178	116	294
June	116	176	292
July	148	267	415
August	218	242	450
September	145	142	287
October	216	149	365
November	203	144	347
December	172	133	305
	1996	1949	3945

OF THE FOLLOWING AGES.

Under one year,	1136
From one to two,	293
" two to five,	215
" five to ten,	131
" ten to fifteen,	74
" fifteen to twenty,	128
" twenty to thirty,	444
" thirty to forty,	515
" forty to fifty,	364
" fifty to sixty,	264
" sixty to seventy,	157
" seventy to eighty,	131
" eighty to ninety,	67
" ninety to one hundred,	22
" one hundred to one hundred and ten,	4
Total	3945

By order of the Board of Health,

JOSEPH PRYOR, *Clerk.*

Health Office, Philadelphia, January 1, 1828.

DISEASES.

Atrophy,	39	Hives,	64
Abscess,	21	Hooping Cough,	51
Asthma,	15	Hæmorrhage,	29
Apoplexy,	47	Hernia,	5
Apthæ,	6	Insolation,	1
Aneurism,	5	Injured Spine,	1
Burns,	23	Inflammation of the Lungs,	144
Bronchitis,	11	Bowels,	69
Consumption,	523	Brain,	55
Convulsions,	268	Breast,	14
Casualties,	22	Stomach,	30
Catarrh,	84	Liver,	41
Cholic,	12	Spleen,	1
Cachexy,	1	Peritoneum,	7
Childbed,	8	Heart,	2
Cancer,	24	Bladder,	4
Concussion,	1	Prostate Gland,	2
Caries,	2	Insanity,	6
Contusion,	4	Jaundice,	8
Cholera,	239	Locked Jaw,	10
Coup de Soliel,	1	Laudanum to excess,	3
Debility,	207	Mania a Potu,	69
Dropsy,	83	Measles,	9
of the Breast,	29	Mortification,	17
in the Head,	107	Old Age,	76
Dysentery,	58	Osteo Sarcoma,	1
Diarrhœa,	87	Palsy,	31
Drunkenness,	53	Pleurisy,	12
Death by opium,	1	Phlegmasia Dolens,	1
Dyspepsia,	7	Perished of Cold,	1
Decay,	21	Rheumatism,	4
Diseased Spine,	4	Rickets,	2
Disease of the Heart,	12	Still Born,	286
Drinking Cold Water,	2	Sudden,	67
Drowned,	46	Small Pox,	100
Disease of the Hip Joint	1	Syphilis,	3
Eruptions,	10	Suicide,	4
Erysipelas,	6	Sore Throat,	9
Epilepsy,	10	Spasms,	5
Fractures,	5	Scrofula,	22
Found dead,	23	Stone,	3
Fungus Hæmatodes,	1	Spina Bifida,	3
Fever,	113	Stricture,	1
Bilious,	54	Tumours,	10
Remittent,	79	Tympanitis,	3
Typhus,	92	Thrush,	1
Intermittent,	14	Teething,	4
Inflammatory,	1	Ulcers,	11
Nervous,	12	Violence,	1
Hectic,	4	Worms,	4
Scarlet,	1	Wounds,	2
Puerperal,	10	Unknown,	111
Gout,	4		
Gangrene,	11	Total	3945
Hysteritis,	1		

Additional Subscribers since the publication of No. 40.

Maine.
Dr. Benj. Ayres,
Daniel M'Ruor,
Ed. Buxton,
Elisha Harding,
Frederick Bartlett,
J. P. Alden,
Rose & Ludwig,
Micajah Hawke,
Daniel Quimby,
Whipple & Weston,
Thomas Doe,
Hon. H. G. Balch,
Dr. W. Whittimore,
Abner Johnson,
Peck & Greely,
Samuel Goldsbury,
Alpheus Chandler,
Ebenezer Handy,
Jotham Moulton,
Ebenezer Poor,
Talman Carey,
Rufus K. Cushing,
Hiram Cannon,
Moses T. Hobbs,
Benj. F. Green,
Benj. Johnson,
David Shepherd,
Snow & Bean,
Asa Quimby,
James Bowen,
Frederick Raymond,
Ward Spooner,
William Ludwig,
Daniel Wadleigh,
Hans P. Hobbs,
George W. Tinker,
Hon. Moses Sweat,
James H. Pierce.

Vermont.
Dr. Elliott Brown.

Massachusetts.
Dr. William Carrington.
John T. Bassett.

New Hampshire.
Dr. Jonathan Dearborn.

New York.
Dr. A. Parker,
Joseph Leo Wolfe,
Eliphalet St. John,
Thomas Seiverton,
Harman Vandusen,
Stephen P. Collins,
R. H. Hoyt,
E. Slosson,
William Chambers,
Amos Pollard,
John R. M'Comb,
L. C. Bacon,
L. Carpenter.

New Jersey.
Dr. John Chapman,
E. L. Hommedieu.

Pennsylvania.
Dr. F. A. Fickardt,
John Boyd,
Joseph B. Wright,
Samuel Carey,
Benj. Rush Erwin,
S. Hayes,
Lewis Marchand.

Delaware.
Dr. James Shallcross

Maryland.
Dr. Robert Dodds,
Th. Jefferson Herdman,
Robert M'Coy,

Virginia.
Dr. John Schrell,
Conrad Kownolar,
John W. Williams,
James R. Coleman,
William G. Micks,
Dawson Warren,
John M'Cleane,
Daniel Egbert.

North Carolina.
Dr. Robt. P. Williamson,
Osmyn B. Irving.

Tennessee.
Dr. John B. Hayes,

Louisiana.
Dr. Maurice Cannon,
Josiah E. Kerr,
William Belknap,
——— Norton.

Indiana.
Dr. R. C. Mathewson.
A. M. Teal,
Arch. Smith,
Archd. A. Veach.

Missouri.
Dr. Alfred H. Packett,
Saml. Hopson,

Michigan Territory.
Dr. Henry Bradley,
E. S. Parke.

Alabama.
Dr. Robert Beattie,
William P. M'Lure.

Georgia.
Dr. William Ellis.
Kentucky.
Dr. Samuel Addams,
Landford Brent.

Illinois.
Dr. William Sim,
Campbell Gilmer.
Ohio.
Dr. Daniel Kemper,
Reuben Culver.

A MANUAL OF SURGICAL ANATOMY.

Containing a minute Description of the Parts concerned in Operative Surgery, with the Anatomical Effects of Accidents, and Instructions for the Performance of Operations. By H. M. EDWARDS, D. M. P. Translated, with Notes, by WILLIAM COULSON, Demonstrator of Anatomy at the Medical School, Aldersgate street, &c.

DR. WEBSTER is preparing for publication an American Edition of the above Work, with Notes and Additions.

We select the following observations from the Translator's preface: "The manual of Dr. Edwards, while it avoids tedious and complicated details, comprehends all that is most essential and instructive in the large treatise of M. Velpeau. It indicates the form, structure, and connexions of the different parts of the body, the knowledge of which is indispensable to the surgeon, and points out the influence which the anatomical arrangement of these parts exercises on the nature and treatment of the principal surgical diseases. It also enumerates the operations which the surgeon is called upon to perform in the different parts of the body, without entering minutely into the merits of the various plans which surgeons have recommended for their performance.

"The only works in the English language, upon the plan of this Manual, are those of Mr. COLLES of Dublin, and Mr. ALLAN BURNS; but these, however ably executed, are confined to the consideration of only a few parts of the body; that of BURNS, indeed, only to the head and neck. The reception which these works have experienced in this country, and the success which has attended similar publications on the continent, afford the best proof of the general utility of the design, and the strongest assurance that this translation of Dr. EDWARD's Manual will not be unacceptable to the profession."